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Addresses.

SECTION ON OPHTHALMOLOGY.

CHAIRMAN'S ADDRESS, DELIVERED BEFORE THE SECTION ON OPHTHALMOLOGY, AT THE FIFTY-THIRD ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION, AT SARATOGA SPRINGS, N. Y., JUNE 10-13, 1902.

FRANK ALLPORT, M.D.

CHICAGO.

I am sure it is quite unnecessary for me to assure you, my colleagues, how much I appreciate the honor you have bestowed upon me by permitting me to preside at the meetings of this Section. The Ophthalmological Section of the American Medical Association is, without intending disparagement to the importance of other organizations, *the* representative association of ophthalmologists in this country. I therefore regard the chairmanship of this Section as the highest ophthalmological gift of American ophthalmologists. Its possession is the more precious, because no taint of political manipulations has ever sullied its reputation. The surest method of not presiding at these meetings is to put forth an effort for such attainment. It has ever come unsolicited. May such conditions ever exist.

The importance of this Section is continually increasing: its membership and attendance is gathering strength and character each year. Its programs are more and more scientific and interesting, and it is sincerely hoped that the one submitted for this meeting may be no exception to the rule. The officers of the Section have endeavored to present a program that would systematically and thoroughly consider a few subjects, rather than one treating of a great variety of topics, and containing the tiresome recitation of numerous cases. We hope and believe that the papers read at this meeting will have a distinct influence upon ophthalmological literature.

The officers of the Section are much gratified at being able to announce that, owing to an invitation extended to Prof. O. Haab of Zurich, Switzerland, last summer, he has journeyed from that distant country expressly to deliver an address before his American colleagues at this meeting. In behalf of this Section, I bid Professor Haab welcome, and extend to him the privileges of the floor, and invite him to freely participate in the discussions of this meeting.

One delightful feature of this gathering not only for our Section, but for every Section, and for the meeting in general, will be the presence amongst us of so many of our friends from the State of New York. The unfortunate and unpleasant barrier which has existed between the American Medical Association and many of the very best members of the New York medical profession is being broken down, and before long these gentlemen will be sheltered where they rightfully belong, and where they will be enthusiastically welcomed, beneath the broad and ample banner of the American Medical Association. To those who have joined the Association this year, and will work in this Section, we extend a hearty welcome, hoping that their presence amongst us will be an incentive for many others to follow in their footsteps. And now, gentlemen, realizing that the papers are many, and the meeting none too long, and that you will probably see and hear your Chairman too much within the hours of the next few days, I beg to be permitted to bring my few opening remarks to a close, and to make way for other and more interesting speakers.

JACQUES DAVIEL AND THE BEGINNINGS OF THE MODERN OPERATION OF EXTRACTION OF CATARACT.

AN ADDRESS COMMEMORATIVE OF THE THIRD SEMI-CENTENNIAL ANNIVERSARY OF THE PUBLICATION OF THE FIRST DESCRIPTION OF THE OPERATION.*

ALVIN A. HUBBELL, PH.D., M.D.

Clinical Professor of Ophthalmology, University of Buffalo; Ophthalmic Surgeon to the Charity Eye, Ear and Throat Hospital, Buffalo Hospital of the Sisters of Charity, Etc.

BUFFALO, N. Y.

The year 1902 marks the third semi-centennial anniversary of the occasion on which Jacques Daviel promulgated to the world, through the Royal Academy of Surgery of Paris, "A New Method of Curing Cataract by Extracting the Crystalline Lens." It is most fitting that the ophthalmologists of the United States, and, indeed, of the civilized world, recognize the event and pay tribute to the genius of the author. Daviel bequeathed to surgery one of its richest acquisitions and to humanity one of its most beneficent legacies. But I fear that both he and his benefaction are too slightingly remembered.

In my studies of his life during the past few years I have been surprised that so little has been said about him, even by his contemporaries, and that the memory of him has been permitted to lapse to such an extent as it has. Even his writings, although not numerous, have never been brought together and published for the edification and profit of our profession.

It becomes, therefore, a double pleasure to me to accept the honor of the invitation of the chairman of the Section of Ophthalmology of the American Medical Association to deliver an address on Jacques Daviel at this time, that I may both revive the memory of one of

* Read at the Fifty-third Annual Meeting of the American Medical Association, in the Section on Ophthalmology, and approved for publication by the Executive Committee: Drs. Casey A. Wood, H. V. Würdemann and J. A. Lippincott.

the great heroes in medicine and recall something of the beginnings of an operation which is one of the greatest achievements of modern times.

Jacques Daviel was, like many of the greatest men of France, a native of Normandy. He was born in La Barre, a small village about sixty miles from Rouen. The exact day of his birth is not known, but the church records of La Barre show that he was baptized Aug. 11, 1693. In those days the rite of baptism was administered by the Roman Catholic church from one to three days after birth, and presuming that he was baptized when he was two days old, his birth took place on Aug. 9, 1693. His father was Pierre Daviel, and he was royal tabellion* under King Louis XIV. His mother was Elizabeth Nicolas. They were people of humble station in life, industrious, and loyal to their king and to their church. Other children were born to them besides Jacques, the descendants of whom are still living in different places in France.

Daviel was born at the close of a century which had been made memorable, not only for what the grand monarch of the age, Louis XIV, with his great cardinals, had achieved in conquest, in authority, in social display and in religious supremacy, but for what he had accomplished in the advancement of literature, art and science, by encouraging letters, fostering painting, sculpture and architecture, instituting academies and promoting science. Although the glory of his reign had passed its zenith before the last decade of the seventeenth century, yet its wane was not then fully realized, and the majesty of the age seemed to be transmitted to the sons of France born at that time. It was at this period that those men first saw the light who, with Daviel, were destined to put France in the lead of all Europe in surgical knowledge and progress during the eighteenth century.

It was at this time that a revolution had just begun in surgical practice and surgical instruction, and this period also marks the beginnings of the scientific study of ophthalmology. Before that time vague notions had prevailed in regard to the pathology of the eye, and opthalmic practice was principally in the hands of empirics who held, oftentimes, the most absurd views of ocular therapeutics. Cataract, then as now, was the most alluring object in the field of practice, and yet its pathology had been but slightly investigated, and the oculists and medical profession at large still held to the belief, which had scarcely been disturbed for more than two thousand years, that the crystalline lens was the seat of vision, and that cataract was, in the words of the learned French surgeon, Dionis,[1] written in 1707: "A foreign substance which is amassed and thickened imperceptibly into a small pellicle between the cornea and the crystalline lens in the aqueous humor in front of the opening of the uvea." This "pellicular body" which constituted cataract in nearly all minds, was believed by some to be in front of the iris, and by others behind it. It is true that John Kepler, in 1604, had demonstrated that the lens was only a refracting body, and that the retina, on which the refracting structures of the eye pictured the image of an external object, was the primary seat of visual perception. It is also true that François Quarré and Rémi Lasnier, surgeons of Paris at about 1650, and after them Pierre Gassendi, Werner Rolfink, Pierre Borrelli, Stephen Blancard, Jacques Rohault and others, taught explicitly that cataract was seated in the crystalline lens and was due to the loss of transparency of that structure. But in spite of these authorities there was an unyielding adherence to the ancient doctrines, and it remained for M. Antoine, afterward known as Maître-Jean, a surgeon of Méry-sur-Seine, and to Pierre Brisseau, the son, surgeon of Tournay, to demonstrate by scientific methods and repeated observations their falsity. Maître-Jean was the first to study the pathology of cataract scientifically, and to make postmortem examinations, although Brisseau preceded him by one year in publication. Maître-Jean began his observations, clinically, in 1682, and examined one cataractous eye postmortem shortly afterward (date not given), and again two others in 1691. He published his observations in his Traité des Maladies de Œil, Troy, 1707, page 112. Brisseau began his investigations in 1705, making his first postmortem examination in April of that year. He reported this case to the Royal Academy of Sciences on Nov. 18, 1705, and published it in pamphlet form in 1706. In 1708 he published a second case, and in 1709 other cases in a small volume entitled "Traité de la Cataracte et du Glaucome."

It would be untimely for me now to recount the details of the incidents attending these scientific investigations, or to follow the controversies which their publication aroused, or even to mention the numerous investigators who became imbued with the scientific spirit which the example of Maître-Jean and Brisseau had inspired. Suffice it to say, that Daviel began life when the foundations of scientific ophthalmology, as well as those of scientific surgery, were being laid. And it was upon both of these that his career of greatness was built.

I will now proceed to trace briefly some of the most marked and important lines of Daviel's career. His early life remains in great obscurity. But he was evidently given a fair education, after the custom of the time and place in which he lived, and in due time he was apprenticed to his uncle, a surgeon at Rouen. Who that uncle was history does not enlighten us. In 1713, when he was twenty years old, he was attached to the army as student-surgeon, and served under different surgeons and in various army hospitals for several years. For some time, also, previous to the autumn of 1720, he continued his studies in Paris at the Hôtel-Dieu.

In May, 1720, the plague broke out in southern France, and the great distress and loss of life caused by it led to a call for assistance. Physicians and surgeons were especially needed. In the autumn of 1720 a circular was posted in the hospitals and medical schools of Paris and other cities of France, asking for volunteers to go to the relief of the stricken provinces. Daviel was one of the first, among twenty student-surgeons, to offer his services. On Oct. 25, 1720, he was examined by La Fosse, surgeon ordinary to the King, and on October 28 was commissioned to go to the relief of the plague-stricken sufferers. From a letter written by Daviel at Digne on March 17, 1721, we learn that he departed from Paris on Oct. 28, 1720, and arrived at Digne on the 16th of the following November. From thence he went to Toulon, Arles, Salon and Marseilles, reaching the latter city May 4, 1722. At each of these places he was faithful to his mission and attentive to the sick of the community, even in the face of fearful dangers, many of his comrades falling by his side, and surrounded as he was by the most discouraging conditions and heart-rending scenes.

It was at Salon, however, that his services received special recognition. Here he was thrown into close rela-

* A tabellion was an officer akin to that of royal notary.

1. Cours d'Operations de Chirurgie, Paris, 1740, p. 547.

tion with the family of a prominent surgeon of the place, Joseph Felix, members of which were sick with the plague, the younger daughter, Marie, dying from it on Sept. 23, 1721. Daviel cared for her at the Saint-Roch Infirmary with such faithfulness and solicitude that he became the object of very friendly regard by the whole family. This feeling of friendship soon developed into passionate affection between Daviel and the remaining daughter, Annette, who was then twenty-one years of age, and on April 19, 1722, his devotion was rewarded by her giving to him her hand in marriage.

The plague had subsided in southern France, and the young couple were in the full enjoyment of their honeymoon, when the alarm was again sounded that the devastating disease had reappeared in Marseilles, and on May 4, the fifteenth day after their marriage, Daviel and his young wife departed for that city, where he

Jacques Daviel (1693-1762), originator of the operation of extraction of cataract—1752.

rendered the same faithful services as in other places. Fortunately, the recurrence was of short duration. During the whole epidemic every member of the medical corps devoted himself, body and soul, to the relief of the afflicted. Many of the physicians succumbed in the combat, others fought until the end, and no one deserted his post. Some of the leading physicians were rewarded by pensions and ennobled, and to the subordinates, among them Daviel, the King made generous gifts, beside presenting to each of them the cross of the Knight of Saint-Roch, bearing on one side the inscription, "propter fugatum pestem Massiliensem," and on the other, "Lud. XV institut.," with permission to wear it—an honor which was highly esteemed.

Daviel remained at Marseilles and made that city his abode for nearly twenty-five years and there established a surgical practice and acquired a surgical experience and skill which were the foundations of his future fame.

When Daviel came to Marseilles he had never been admitted to the mastership in surgery, and only masters had the right to practice independently. Not wishing to submit to the usual examination for admission, termed the "chef-d'œuvre," he availed himself of a royal ordinance of 1676, which gave the aldermen of the city power to grant letters of mastership to student surgeons who had served in the plague. On application he and three other plague surgeons were accordingly made master surgeons by the aldermen on Aug. 13, 1722. The master surgeons of the city, however, refused to recognize the letters of the aldermen and to admit the recipients into their ranks, and prohibited them from opening "shops of surgery." The aldermen intervened in the prohibition, and brought the case before parliament on May 29, 1723, and on June 25, following, parliament condemned the action of the master surgeons and ordered that the masterships granted by the aldermen be recognized and that the plague surgeons be admitted into the corporation of master surgeons without examination.

Daviel's career as a master surgeon was now begun. Being a man of intelligence, of an inquiring mind and also being energetic and ambitious, he at once set himself resolutely to work. He had already won the support of the aldermen of Marseilles, as shown by their granting him letters of mastership in surgery and defending him in the action brought by the master surgeons against him in Parliament, and again their favor was solicited and he was appointed, on Oct. 30, 1723, one of the surgeons of the Hôtel-Dieu of that city. This was an honor that he coveted, not only for the prestige that it gave him in the community, but also for the opportunity which the position afforded him of prosecuting the anatomic and surgical studies of which he was so extremely fond. No sooner was he installed in the service of the Hôtel-Dieu than he sought to avail himself of the provisions of the ordinances of 1724, creating royal demonstrators of anatomy and surgery, and at once he became a candidate for that office in the hospital to which he was now attached. Heretofore there had never been official teaching of anatomy and surgery in the hospitals of Marseilles, and Daviel felt that this neglect should no longer continue. He not only had proved himself a man of ability and energy, but had also distinguished himself for his courage and self-sacrifice during the epidemic of the plague. He soon had the confidence of the physicians and surgeons of the King, and through the recommendation of Georges Marechal, the first surgeon of the King, he was one of the first to be named royal demonstrator of anatomy. From the first year of his hospital service he gave regular courses of instruction in anatomy and surgery. His instruction was appreciated by those who followed him, and on May 4, 1728, he received official appointment by a decree of the aldermen and lieutenants general. Ten years later, through the influence of La Peyronie, who was then acting first surgeon to the King under Marechal, he received royal approbation, and Louis XV appointed him "royal demonstrator of surgery and anatomy."

In 1738, then, Daviel's position as demonstrator became a royal appointment, and he was, in the meantime, given unusual privileges in regard to cadavers. Besides using them for public demonstrations, he put them to his own profit in the study of anatomy and in perfecting himself in the use of surgical instruments and in the maneuvers of surgical operations.

That Daviel was an enthusiastic student and teacher of anatomy is shown by a statement of Monsieur de Joyeuse, a contemporary and friend of his and physician-in-chief of the galleys, in which he says: "That Daviel never has enough cadavers." Daviel's work as a teacher was not fruitless, for many of his students became distinguished practitioners.

Besides being made surgeon to the Hôtel-Dieu and being admitted to the body of master surgeons, he was, at about the same time, appointed surgeon-major to a galley at Marseilles, and in the exercise of the functions of this office his practice and experience were enlarged, much to his surgical and personal advantage.

It was in this service that he performed his first operation for cataract, using the method of depression, which was the only one then known. The result was successful, and it so fixed public attention on him that his services as an oculist at once began to be in demand.

Says Dr. Chavernac of Aix-en-Provence: "From that moment hard, incessant work created for him a new existence. All changed face. The first half of his life disappeared and was eclipsed by the second. Daviel, the humble anatomist, became an oculist of the first order."

One of his contemporary biographers, d'Apples of Lousanne, says that it was at about 1730 that Daviel performed one of his earliest operations for depression of cataract. It was on a respectable Swiss porter of Madame d'Orleans. He had been treated by another skilful surgeon unsuccessfully, but after Daviel's operation he had vision, even to an advanced age, sufficient to attend to his affairs and to read the smallest characters with a magnifying lens.

The success which attended Daviel's first operations on the eye deepened his interest in the diseases of that organ. He energetically availed himself of the anatomic material which was at his disposal, supplementing his work on the eyes of the living with experiments and operations on those of the dead. He acquired much skill as a surgeon-oculist, and soon gave himself up exclusively to ophthalmic practice. As early as 1736 his reputation as an oculist had become so great that he was called to Lisbon, the capital of Portugal, to operate.

During the eighteenth century, as well as in other centuries, men of genius and reputation were attracted to Paris, and Daviel was no exception. In 1746 he removed to Paris, arriving there November 7 of that year, and thereafter made that great medical center of the world, at that time, his abode. He was then fifty-three years old and was at the zenith of his activity. His reputation was already extended. According to the records of the Royal Academy of Surgery,[2] he was elected a corresponding associate member of that body in 1740 and was stated to be master in arts, surgeon at Marseilles, surgeon maintained on the galleys, member of the Society of Sciences of Toulouse, member of the Academy and Institute of Sciences of Bologne, and royal professor and demonstrator of surgery at Marseilles. His being appointed to these positions alone proves that he had distinguished himself long before he left Marseilles. But at Paris his fame greatly increased, undoubtedly in part on account of his merits, but in part, also, through the influence of his professional friends of the court. Louis XV appointed him his surgeon-oculist by "the reversion of M. de Luze" in 1749. He had already been made councilor and surgeon-ordinary to the King.

2. Mémoires de l'Académie Royale de Chirurgie, Tome I, Paris, 1743, p. 36.

According to a notice, undoubtedly inspired by Daviel, published in the Mercure de France of July, 1749, it is shown that, while he had lived in Paris since 1746, his family arrived there on May 8, 1749; that he had been honored by an appointment as oculist to the King on Jan. 1, 1749; that he used his house as a sort of a private hospital, and that he there gave instruction on diseases of the eyes.

Soon after Daviel established himself in Paris he began to publish some of his experiences and conclusions, mostly in the form of letters, and in a few instances as "memoirs." The first letter[3] was to his friend, de Joyeuse, and was dated Sept. 30, 1748. From this time on his views were given more frequent publicity, and while he showed himself attentive to ocular diseases generally, it became manifest that he was most zealous in the study of cataract and in devising better means

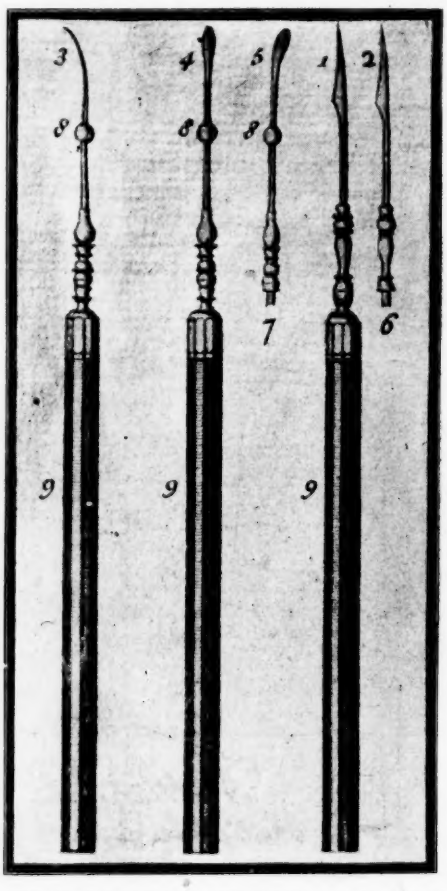

Plate I.—Daviel's improved instruments for depressing cataract (1745-1748).

of curing it. This first letter to de Joyeuse fully indicates the trend of his mind, and in it is shown especially his dissatisfaction with the old method of depressing cataract. He then attributed much of the difficulty and many of the bad results to the use of sharp-pointed and sharp-edged "needles." He said that this operation for cataract "has always seemed to me to be very doubtful. * * * It is only after many experiments performed on the eyes of cadavers and a large number of operations on those of the living, with the view of perfecting the method of depressing cataract, that I have learned all the dangers and all the points of doubt which one can have in this matter. In multiplying my experiences and observations I have been forced to recognize, at last, that it is far from being a fact that this operation is

3. Mercure de France, September, 1748, p. 198.

as certain and as easy as many people have believed, and as I believed, myself, when I began to practice it. I owe this confession to the truth, although it seems, at first, to do some wrong to the art to which I have been entirely devoted for about eighteen years, and which I have resolved to practice exclusively the rest of my life." Daviel was fully confirmed in the opinion that there was nothing more dangerous than to carry a pointed and sharp-edged instrument into the eye, and proceeded to show the advantages of the instruments which he had devised for the operation of depression, and which are shown in the accompanying plate (Plate 1) taken from Mercure de France, April, 1750, page 26 (Figures 1, 2, kind of a small bistoury in handle and unmounted, used to incise the membrane of the eye; 3, 4, 5, blunt and plano-convex instrument, with which, introduced through the opening, the operation is finished, shown in profile at 3, full size at 4, unmounted at 5, screw to enter handle 6, 7, sort of buttons at 8, 8, 8, and the handles at 9, 9, 9). In this letter, also, Daviel says that he devised his "flat needle with a blunt end" in 1745, while he was at Marseilles, on account of the trouble he had in the case of Brother Felix, a hermit of Aiguille, on April 8 of that year, with the sharp needle. He adds that on Oct. 18, 1745, he operated on the seventh patient by his new method, whose cure "did him so much honor." For some time afterward Daviel continued to depress cataract by his new method, which he says he brought to a "point of certainty by continuing to make experiments daily on the eyes of cadavers." It consisted in making an incision in the lower margin of the cornea with a small bistoury, and then passing a blunt "needle" through this opening on to the anterior surface of the lens, and depressing it into the vitreous humor in the usual manner. This first letter also refers to numerous other operations on the eye and its appendages which he performed, showing the variety of his ophthalmic practice. And it does more; it describes the first case recorded in modern times of extraction of cataract from the "posterior chamber" of the eye. This case was that of Monsieur Garion, a master wigmaker of Paris. Having done his best to depress the cataract, but failing, Daviel decided to open the lower part of the cornea. This he did, although it "presented great difficulties on account of the cornea having become much relaxed and almost collapsed from the outflow of the aqueous humor, half of which had passed out through the first puncture which had been made to depress the cataract." The exact manner in which he opened the cornea on this occasion he does not describe. After making the opening he held it apart by lifting the corneal flap with a small forceps, and with the "needle" introduced into the "posterior chamber of the eye" the lens was brought out, followed by a small portion of vitreous humor.

The patient at once distinguished objects and recognized several persons who were pointed out to him. The operation was so successful that no pain followed. The corneal wound cicatrized perfectly, the eye regained its natural form, and although the pupil was slightly oblong, this was perceptible only to the eyes of members of the profession, and the patient could see to read distinctly with a cataract glass. Such is the description of the case nearly in Daviel's own words. He regarded it as an operation without precedent and as being one of too great interest to the public to pass over in silence. The result was so successful that it gave him, as he says in the letter, "great ideas in regard to the extraction of cataract."

Daviel, in this letter, in referring to the case of Brother Felix, does not tell us that he extracted even a part of the lens through the corneal incision. On the contrary, he says that by means of a "needle without point or edge," he succeeded in depressing the cataract of the poor hermit, upon whom "he had labored vainly for nearly half an hour." In 1752, however, he speaks of this case again, and tells us that in the operation on Felix, in 1745, he "enlarged the first opening of the cornea with small, curved scissors, and by this means all that was in the anterior chamber (portions of broken lens and blood) was evacuated."

It is probable that after withdrawing the blood and some of the lens substance from the eye, he then depressed the remainder of the cataract (the nucleus) in the usual way, leaving the pupil, as he says, clear and enabling the patient to distinguish objects. The eye, however, was lost by subsequent suppuration. The case of Brother Felix should therefore be classed with those of depression.

These two cases impressed Daviel deeply, and reflections upon them, as he admits later, led him soon to make further trials of extraction as a definite means of treating cataract.

Daviel had, long before this, acquainted himself with the experiments of Maître-Jean, Brisseau and of those who followed them, and he had studied the writings of Pourfour du Petit, Woolhouse, Heister, Taylor and others. He knew that both Charles St. Yves and Jean Louis Petit had, in 1707 and 1708, each extracted a lens through an incision in the cornea which had become dislocated, accidentally, into the anterior chamber. In short, he was familiar with the true nature and varieties of cataract and the methods of treating it known and practiced by his predecessors, and from personal experience he understood the difficulties and dangers attending the standard operation of depression. His experience, therefore, with Brother Felix in 1745, and with Monsieur Garion in 1747, led him to ask the question whether the bad consequences of depression, with which he was only too familiar, could not be averted by extracting the cataract through a corneal opening. He set himself to work to answer this question. He had clear judgment, his mind was richly stored with anatomic knowledge and his hand was trained to dextrous manipulation. The failure from which he believed he might have escaped in the case of Brother Felix had he performed a premeditated extraction, and the success in the extraction following the unsuccessful attempt at depression in the case of Garion, were sufficient to encourage him to seek comparisons between extraction and depression.

Soon after the Garion case an opportunity was afforded him to put to the test the new treatment which his experience had suggested to him and to perform his first predetermined and prearranged extraction. The case was that of a woman whose name, age or condition he does not mention. He opened the cornea with a small knife and then enlarged the incision with small curved scissors, as he had done on Felix and Garion. He then passed a small spatula to the upper part of the cataract and "detached it," and with this instrument drew it out in small pieces. The pupil appeared clear, there was not the slightest accident, and in fifteen days the patient was well. Subsequently, in four other cases, the new method was successful. Further trials gave him more and more assurance of its superiority over the old operation of depression, and finally, in 1750, he had sufficient experience to cause him to resolve, thereafter, not to

operate except by extraction. His cases grew more and more numerous, and he was called to various estates and cities to operate. At Rheims, in September and October, 1751, he performed forty-three operations, assisted by the young surgeon Caqué. These operations were reported to the Royal Academy of Surgery of Paris soon afterward and created great excitement. A few indorsed the new method and many opposed it. But Daviel held firmly to it, and in 1752, the year we now commemorate, he considered it sufficiently perfected and sufficiently fortified by good results to submit it to the world. This he did through that learned and discriminating body, the Royal Academy of Surgery of Paris, in a memoir read twice, according to the rules of the Academy, the first time on April 13, 1752, and the second time on November 16, the same year. It was published in 1753.[4] While Daviel had been performing his operation for several years, while many physicians

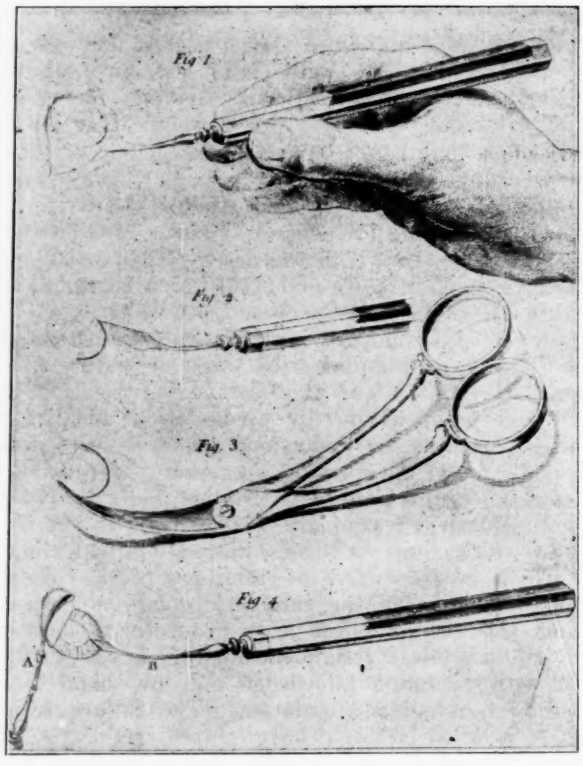

Plate II.—Daviel's operation of extraction (1752).

and surgeons had witnessed it, while J. B. Thurand, one of his pupils, had already described it in a thesis sustained one month before Daviel's memoir was first read before the Academy, and while several surgeons had spoken of it more or less publicly, yet his memoir was the first detailed presentation of the new operation by the author himself.

The operation which he had invented and now made public consisted in incising the lower part of the cornea exactly at its junction with the sclera. He first made an opening into the anterior chamber at the extreme lower margin of the cornea with a myrtiform or triangular-shaped knife, and then, after withdrawing this, he enlarged the incision on both sides with a narrow, blunt-pointed, double-edged knife as far as he could easily, and finally when the cornea became too much relaxed to continue the incision he completed it to the extent desired with delicate scissors, which were so curved on the flat and edge as to correspond to the curve of the corneo-scleral line. These, of course, were made right and left, and the blade to be introduced into the anterior chamber was blunt pointed. According to this memoir the incision was of equal extent on both sides of the cornea, and was carried to a point on each side "a little above the pupil." Having completed the incision he gently lifted up the corneal flap with a small spatula and incised the anterior capsule of the lens with a sharp-edged needle.

After doing this he carried the spatula between the lens and the iris "so as to entirely loosen the cataract and facilitate its issue." After the cataract was delivered the corneal flap was then allowed to fall into place. If the cataract happened to be soft and "glairy" or broken into pieces, the remnants were removed with a curette. The pupil might sometimes be disarranged by the passage of the lens, especially if it was large and hard, and it should then be readjusted. The corneal flap being accurately replaced, the eye was gently cleansed and covered with a small compress, over which plasters were applied and the whole was kept in place by a bandage without much pressure. Some cases required strong pressure to deliver the cataract. Adhesions of

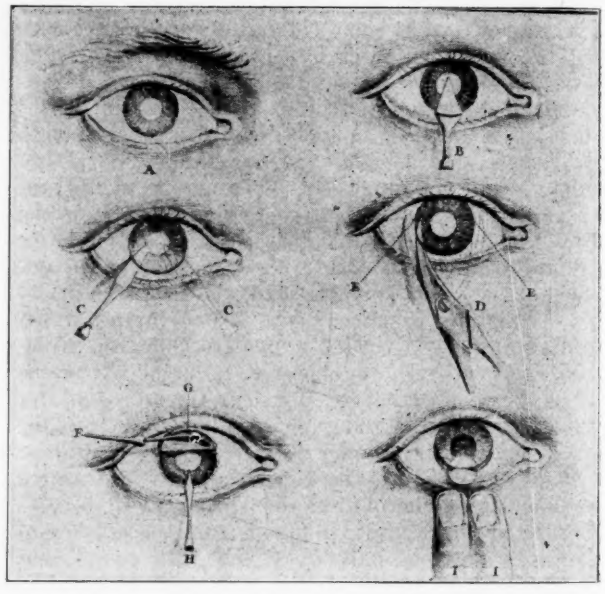

Plate III.—Daviel's operation of extraction (1752).

the lens to the iris were to be broken up with a small spatula. There might be hemorrhage into the aqueous chamber from wounding the iris, but the blood was easily removed through the incision and did not interfere with the operation. The escape of the aqueous humor during the operation was of no consequence, but if the first knife be withdrawn too quickly in beginning the corneal incision, the iris might follow and be caught between the lips of the wound, when it could be easily disengaged by opening the wound with a spatula, if it did not become replaced by the natural movements of the eye. In the course of healing the iris might pass through the wound and cause staphyloma, and it should be replaced. Such protrusion could almost certainly be avoided by being careful to dress the eye without compressing it with the bandage. The escape of vitreous humor was not considered to be a serious accident. Such, then, was Daviel's operation, omitting the directions as to the position of the patient, surgeon and assistant during the operation and some minor details.

4. Mémoires de l'Académie Royale de la Chirurgie, Tome II, Paris, 1753, p. 337.

In his original operation he made his incision so as to include considerably more than one-half of the circumference of the cornea. Although this has been denied by Dr. de Wecker, it is proved beyond question to be a fact by statements of his contemporaries, by his own description that it was carried "a little above the pupil" on each side, and by the plates accompanying his memoir at the time of its publication, of which the figures hereby shown are photographic copies. (Plates 2 and 3.) He did, however, shorten the incision afterward, even before the expiration of 1752, so as to include only the lower half of the cornea.

Evidently the capsule and iris made trouble for Daviel, occasionally, the same as they do for us to-day, but he was always ready with means to overcome it. A dense thick capsule was treated by excising a central piece of it before extraction. A prolapsed iris was to be cut off, if it could not be returned, no harm coming from the incision. In case the sphincter of the iris was tight and unyielding, he divided it with scissors, a procedure which Dr. Chavernac of Aix (in Provence) has recently favored as a valuable accessory to the simple operation. He also, later in his practice, performed iridectomy in some cases in the course of the operation, as is shown by his own words in a letter to the celebrated von Haller, dated Sept. 30, 1761. In speaking of the case which von Haller had sent him for operation he said: "I took away one-half of this membrane (the iris) in order to form an artificial pupil, since the natural one had been almost entirely obliterated and destroyed. * * * * This is not the only time that I have been obliged to take away the iris or to make a section of it, and without having seen the least accident follow. I have some great observations to give on this subject." Unfortunately, Daviel did not live to publish them.

In the last years of his life Daviel tried a modification of the incision, making a triangular flap instead of a semi-circular one. This he did by cutting with a small bistoury from below and inward in a direction upward and outward across the cornea to a point on a level with the horizontal meridian of the eye, and then, from this point cutting upward and inward across the cornea with a slender pair of scissors, and thus completing the other side of the triangle. He had also experimented with the triangular flap with its base upward. (See Figs. 1 and 2.) This method required fewer instruments to execute it, and he claimed some advantages for it. But he did not live to give it an extended trial, and nothing more came of his suggestion.

The operation of 1752, with the incision lessened in extent before the year expired so as to include only one-half the circumference of the cornea, remains, therefore, the model which Daviel handed down to posterity. He had given the best years of his life, for he was then fifty-nine years old, and his best thought and study to developing and perfecting it. He admitted that accidents might attend the operation, but he said, "they are very slight in comparison to those which may happen after the ordinary operation" (that of depression), and its advantages were many. Other surgeons afterward proposed the use of knives of various kinds in making the corneal incision with the view to lessening the number of instruments and saving time in the performance of the operation, but with all the fervor of a true Frenchman, he opposed them vigorously and defended his own method as being safe, easy of execution and successful. His own words were: "My method is simple in all respects. The eye should be free when it is operated upon, especially if one desires to operate artistically. Forceps, hooks, the *speculum oculi* and narrow or broad knives are dangerous instruments, capable of exciting spasm of the eye, of tearing the iris, of expelling all the vitreous humor."

Daviel's operations were smooth and artistic, and their successes far outnumbered, proportionately, those by the old method. At different times reports were made of the number of his operations and their results. In November, 1750, his friend, Vermale, stated that he had then extracted twenty-three cataracts without a failure. Daviel said in his memoir of 1752 that he had then operated 206 times with 182 successes. In a letter addressed to "Journal des Savants," dated Jan. 12, 1756, he said: "I think no one doubts the excellence of so good a method, for out of 354 persons that I have operated on, 305 were perfectly successful." Again,

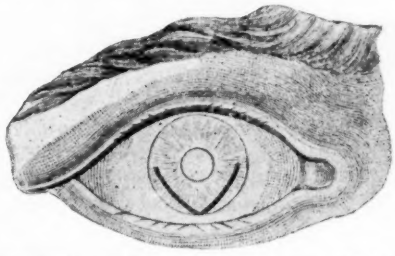

Fig. 1.—Daviel's triangular flap of 1761 and 1762 (de Wecker).

in a letter to J. L. Hoin, surgeon at Dijon, dated Dec. 12, 1756, he stated that he had, during the preceding six months, extracted 80 cataracts with only one failure. Adding this number to the total reported six months before, and it would make the whole number of Daviel's operations up to the close of 1756, 434, with 50 failures. How many operations he performed between the end of 1756 and the time of his fatal illness in September, 1762, is not known. The number must have been larger, however, than during the time preceding the close of 1756, when he made his last report.

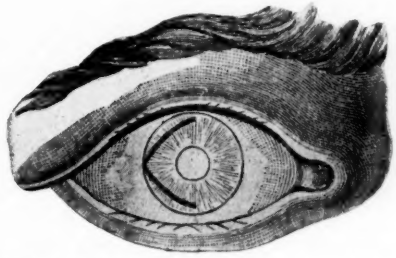

Fig. 2.—Daviel's triangular flap of 1761 and 1762 (de Wecker).

Of course, better results are obtained now with our antiseptic methods, but his results were remarkable in view of the new and untried method, and they grew better with his increased experience.

It is true that Daviel made his incision downward, but there is much that could be said in its favor. It is within the memory of many now living that the simple flap extraction with incision downward was practiced by the most eminent operators of the world. Even to-day so eminent an ophthalmologist and operator as Dr. Schweigger[5] of Berlin is practicing it.

The review given above shows that Daviel continued that same active life in Paris which he had manifested in Marseilles. His position as oculist to the King and his close and friendly relations to the most distinguished surgeons and physicians, not only of Paris, but of all France, gave him a clientele from 1750 to 1762 which

5. Archives of Ophthalmology, vol. xxvii, 1898, p. 255.

probably has never been equaled in number or celebrity by any other oculist for a similiar period of time. His practice was exceedingly large in Paris, and he was called to all parts of Europe to operate. Not only did he treat the rich, but he served the poor as well, and with a devotion and generosity that has seldom been outdone. The learned Diderot, who was acquainted with him and who had seen him operate, exclaimed, "who has not known the famous Daviel or heard him spoken of?" Again he says: "The beneficence of Daviel brought patients to his laboratory from all the provinces of the kingdom who came imploring his help. His reputation attracted an assemblage both curious, learned and numerous."[6]

As I have said, Daviel's contributions to ophthalmic literature were not numerous. He wrote a few letters to professional friends, some of which were explanatory of his work and methods of operation, and some were controversial. The earlier ones referred especially to his improved method of depressing cataract, and later to his new operation of extraction. Among the later ones of especial interest were those written to the renowned von Haller. Beside the celebrated memoir of 1752, he read other memoirs before the Royal Academy of Surgery, one in 1756, defending his method and instrumentation, and another in 1762, describing his modified, triangular incision. Another memoir on "Congential Cataract" was published in one of the French medical journals in 1762. In 1755 he presented a paper to the Royal Society of London on "Cancer of the Eyelids," and in 1759 one on "Two Adherent Cataracts" to the Academy of Sciences of Stockholm. His correspondence and papers are of supreme interest, but it is impossible for me to draw from them further at this time.

Daviel was recognized as a man of science and professional distinction, and was elected to membership to nearly all the scientific bodies and academies of Europe. Not only was he honored by scientific bodies, but poetry paid tribute to his genius and art personified his career in an allegorical design, leaving us, in the meantime, the only original portrait of him now in existence.

Daviel had three sons and several daughters. The eldest son, Henri, became a surgeon and was his father's assistant for several years. In 1757 he sustained a thesis on cataract, and in it defended the method of operating devised by his father, even the use of the scissors. He entered the army, serving there as surgeon-major to a regiment of cavalry, and was untimely cut off by a malignant fever at Zell, Hanover, in 1758. The other two sons were afterward spoken of as cadets in the army, and it is believed that one of them became a surgeon. Otherwise, both they and their sisters have been lost to history.

Early in 1761 Daviel began to develop symptoms of throat trouble. According to one of his friends, who saw him in August and September of that year, he complained of "a derangement of his tongue which impeded his speech somewhat," this impediment being attributed to the "viscousness of the saliva." At the meeting of the Royal Academy of Surgery on April 22, 1762, when he presented his memoir describing the triangular incision in the operation of extraction of cataract, he was unable to read it, because of "the results of a paralysis," and Morand read it for him, "while he indicated the manual of it on a figurative chart."

6. Diderot: Addition à la lettre sur les Aveugles.

Daviel left Paris about Easter time, in 1762, and spent the following summer in different parts of France, hoping to become improved in health. He arrived at Lyons early in September, and from there he went to Geneva, to consult the celebrated physician, Tronchin. Without the knowledge of his physician he took a violent purgative. This was followed by a "colliquative" diarrhea and fever, and he became rapidly worse, and died at 6 o'clock a. m. on Sept. 30, 1762, being then 69 years of age. Tronchin had the body opened, and it was found that "the whole mass of blood was impoverished, and the muscles of the pharynx and larynx were affected with paralysis." Those who have studied the case in recent years believe that the disease was cancer of the larynx with an invasion finally of the esophagus (Haltenhoff). The Hôtel de la Balance, at Place de Bel-Air, Geneva, where Daviel died, still exists. He died alone in a foreign land and left a wife, two sons and several daughters at home to mourn his loss. He was buried in the Roman Catholic cemetery at Grand Sacconex, near Geneva. The Swiss oculists, in 1885, erected there a monument to his memory. Following their example, monuments have been erected at La Barre and Bernay, in Normandy, and busts of him have been placed in the Hôtel-Dieu of Marseilles, and in the General Hospital at Montpellier. The city of Rouen is perpetuating his memory by naming one of its streets after him. These are rather tardy recognitions, but they are deserved, and may better come late than never.

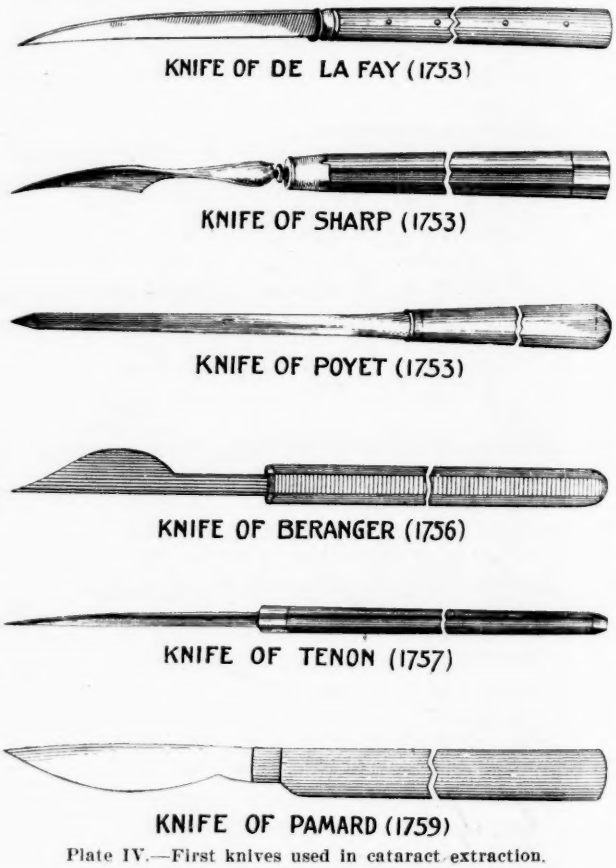
KNIFE OF DE LA FAY (1753)
KNIFE OF SHARP (1753)
KNIFE OF POYET (1753)
KNIFE OF BERANGER (1756)
KNIFE OF TENON (1757)
KNIFE OF PAMARD (1759)

Plate IV.—First knives used in cataract extraction.

There is much in Daviel's life and work on which it is impossible even to touch within the limits of an address. His operation of cataract extraction was his great achievement. Having demonstrated the value of it to the satisfaction of all "open minds," his method was immediately taken up, experimented with, verified and

simplified. As I have stated in another paper,[7] his surgical colleague Georges de la Faye was the first (Nov. 11, 1752) to suggest a single knife with which to make the corneal incision, but Samuel Sharp of London was the first to put such an instrument to actual use on the living (April 7, 1753). From that time henceforward the single knife, modified in different ways by Poyet of Paris (1753), Joseph Warner of London (1754), Louis Béranger of Bordeaux (1756), Jacques René Tenon of Paris (1757), Pierre-François-Benezet Pamard of Avignon (1759) and by others in rapid succession, soon became the powerful rival of Daviel's knives and scissors, and finally, long before the eighteenth century closed, it superseded them entirely. To follow the variations which were made, and to note the auxiliaries used to separate the lids, to steady the eyeball, to incise the capsule of the lens, etc., would be impossible on this occasion. It is sufficient to remark that the narrow knives of de la Faye, Sharp and Tenon were the forerunners of all subsequent ones, even those of to-day. Those of Béranger and Pamard became the example of Beer and his followers, while a medium ground was taken between the narrow and broad knives by Wenzel, Richter and many others (see Plate 4). It was not long after Daviel died that his instrumentation had no champion, but his downward incision was practiced for a century. Pamard was the first to make an upward incision on a patient, Aug. 13, 1784, and he reported it to the Royal Academy of Surgery, Paris, in a letter dated August 17 of the same year; but his example was not followed till later in the eighteenth or commencement of the nineteenth century, and then only by a few.

Such, then, were the actual beginnings of the modern operation of the extraction of cataract. The way had been prepared by Maître-Jean, Brisseau and their followers, who demonstrated beyond question the true nature of cataract. The two cases of Jean Méry, in each of which a cataract had been dislocated into the anterior chamber of the eye and was extracted by St. Yves and Petit, respectively, through a corneal incision, with the recovery of the patients, proved the possibility of removing the lens from the eye without the loss of that organ. It therefore remained only for a man of courage, intelligence and foresight like Daviel to utilize the observations made before him and to join them to his own experience, and out of both to devise a method by which, as a regular procedure, a clouded lens might be taken out of the eye and yield better results than by displacing it into the vitreous humor.

One hundred and fifty years have now passed since Daviel first handed over to the public this product of his genius. During that time his operation has been the subject of the closest attention and study by ophthalmologists and surgeons throughout the world, and it has undergone an infinite number of modifications and shadows of modifications, and yet to-day, substituting for Daviel's knives and scissors the modified knife of Tenon, of 1757, as represented in the von Graefe knife, and changing the incision from downward to upward, the classic operation of Daviel continues to be, essentially, the ideal one as exemplified, I believe, in the practice of de Wecker, Panas, Webster, Knapp and many others.

This altogether too hasty glance at the career of Daviel brings before us a man of great energy, enlightment, wisdom and genius. He knew how to assimilate the experiences of others with his own, and how to make both contribute to the overcoming of the obstacles which were ever presenting themselves to him. He was always studying for improvements, and was sincerely desirious of doing all in his power to relieve suffering. He had great love for the applause of the world, but he never lost sight of the amenities and duties of his profession or of its philanthropy. He availed himself of every opportunity for acquiring and also imparting knowledge, and sought every laudable means of advancement. He courageously faced every difficulty and never flinched in combat. But in all his endeavors, in all his victories, nothing has so marked his genius as the "invention" which we celebrate to-day. The world may forget that he had the courage and patriotism to battle against a devastating disease from which 40,000 fell, that he was a distinguished and benevolent surgeon and oculist, that he was greatly honored by learned bodies, by the court and by his King, but it will never forget that he bequeathed to it a surgical operation which, in its far-reaching and beneficent results, is comparable, it seems to me, only to the surgical heritage, laparatomy, transmitted to us by our own countryman, Ephriam McDowell.

Let us never cease to admire the genius and courage of this man, or to emulate his example of patient industry, experimential study and practical application of means to ends. Let us inscribe him on our memories as one of the great benefactors of mankind and one of the mighty heroes in medicine.

7. Ophthalmic Record, November, 1900.

Original Articles.

A NEW OPERATION FOR THE RELIEF OF SEVERE CASES OF RECTO-VAGINAL FISTULA.*

A. PALMER DUDLEY, M.D.
NEW YORK CITY.

Some months ago I read an article before the New York Obstetrical Society giving simply a short description, accompanied by some drawings (for which I expressed my gratitude to Dr. John Aspell of New York) of an operation which I devised while delivering my course of lectures at Dartmouth Medical College last year. I, at that time, presumed to designate it as "Dudley's Operation for the Relief of Severe Cases of Recto-Vaginal Fistula," because, so far as I was able to learn, in looking over the record of such cases at hand, it was original with myself and rather unique in procedure; nevertheless it was successful, and, in my judgment, it will in the future receive recognition from the profession, and take its place as a surgical relief for such a condition. As that article has never been published, except in abstract, I may be permitted to again give a short description of the case and the method of procedure for relief. It would be the most concise manner in which I could present my claims for originality for the operation in this country.

THE ORIGINATION OF THE OPERATION.

The patient operated on by this method was 47 years of age, married, and the mother of three children. She was admitted to the "Mary Hitchcock Hospital" July 23, 1901, suffering from a combination of pelvic diseases, of which may be mentioned—hemorrhoids, laceration of the perineum, recto-vaginal fistula, laceration of the

* Read at the Fifty-third Annual Meeting of the American Medical Association, in the Section on Obstetrics and Diseases of Women, and approved for publication by the Executive Committee: Drs. A. H. Cordier, W. E. B. Davis and Henry P. Newman.

cervix and retro-displacement. The major condition was recto-vaginal fistula through which fecal matter and gas constantly escaped, which had been operated upon twice before, without successful result.

She was a woman without means, occupying a free bed in the hospital, so I determined to do all necessary work for her, providing she stood the anesthetic well. Each and every member of this society is, or should be, perfectly familiar with the operative methods of procedure for all forms of fistulæ as practiced by Sims, Emmet, Bozeman and their followers in this country down to the present time, and it would be out of place for me to call your attention to the different methods and peculiarities of each operator.

Instantly upon examination of this case I recognized the possibility of a third failure, unless I could by some means treat the rectal mucous membrane in some manner whereby it would be impossible for a leakage of gas and fecal matter to take place in case the vaginal side of the wound did not heal by primary union, and as the patient was suffering from hemorroids which required removal, I determined upon the following plan:

FIRST USE OF THIS METHOD.

The patient was placed in the Sims position, the quadrivalve speculum—such as I show you here—was introduced into the bowel and the sphincter thoroughly but carefully divulsed. I then made Whitehead's operation for hemorrhoids, going straight around the entire anus, just through the mucous membrane. I then dissected the mucous membrane of the rectum from its attachment to the sphincters, and continued the dissection, separating the bowel from its attachments to a level with the upper edge of the opening in the vagina, carefully separating the latter from around the edge of the fistula. I then continued the dissection on sufficiently far to allow me to draw the rectal mucous membrane, including the fistulous opening, down to the anus. The mucous membrane of the rectum so dissected out was then cut away, including the hemorrhoidal vessels. The rectum was then stitched to the skin of the anus around the entire circumference of the latter, as in Whitehead's operation for hemorrhoids. This procedure, of course, did away with the fistulous opening in the bowel. The patient was then turned on the back, the uterus curetted for fungous growth, the fistulous opening through the vaginal coats denuded and stitched with catgut, simply as a superficial wound in the vagina. The perineum was then restored by my own methods of operation, using only catgut as a suture. A small abdominal incision was then made, adhesions about the uterine appendages broken up and the uterus brought forward and fastened by ventro-suspension.

ITS RESULTS.

The patient went to bed in good condition; each one of the wounds healed kindly by primary union, and the patient left the hospital just four weeks after the operation, having control of the sphincter ani, the fistula perfectly healed and the uterus in good suspension. I want to draw your attention to one point in this operation, and the future application of it in cases of accidental fistulæ high up in the vaginal vault, as a result of hysterectomy. It is this: in my judgment, in case of high fistula, it would not be necessary to resect the bowel to a level of the fistula, but only such portion of the bowel as would be sufficient to change the position of the rectal opening with that of the vaginal so as to flap each fistulous membrane against unbroken structures, and then sewing the parts carefully together with whatever sutures you deem best suited to the occasion.

REPETITION OF THE NEW PROCEDURE.

My second operation of the kind was performed on March 5 last, on a single girl, 23 years of age. She gave a normal menstrual history, but complained of having suffered from rectal abscess for a year previous. She had been twice in the hospital under the care of other surgeons, without relief. The fistulous opening in the bowel was high up in the anterior wall of the rectum, while the external opening was through the right labia at about the site of the orifice of the vulvo-vaginal gland. Examination showed burrowing tracts into the center of the perineum, and upward into the right labia minora. The rectum was resected as in the previous operation and stitched to the ends. The track of the external opening in the labia majora was then incised, thoroughly curetted with a sharp curette down to the mucous membrane of the rectum. The track was then lightly packed with balsam of Peru gauze and allowed to heal by granulation. As the uterus was retro-displaced

Fig. 1.—Showing location of fistula, with the Sims speculum in rectum. (Dudley.)

and bound by adhesion, I made small abdominal section, broke up the adhesions and finding the vermiform appendix somewhat involved in these adhesions, I removed it and then suspended the uterus. The patient made a perfect recovery.

In offering this method of operation for such severe cases of recto-vaginal fistula to the profession, it was my desire that it should be freely criticised, and if unworthy, condemned.

A SIMILAR OPERATION BY SEGOND.

Since writing this article I have searched foreign journals for any publication bearing upon a similar method of procedure, and I find that this method of operation was not original with me, although, unbeknown to any other operator, I did the same work.

I find that Paul Segond of Paris, in 1895, performed a similar operation, the history of which is so unique and the result so good that I desire to publish a complete translation of his paper, as a companion paper to mine, and give him full credit for having been, so far as I have been able to learn, the first to do a similar opera-

tion, although it will be noted by those who read this article that the methods of procedure differed in this manner (see the illustrations): while I did the work in Sims' posture, he did the operation with the patient in the lithotomy position.

Other points of difference will be noted by those who peruse the article. Nevertheless, I desire to most graciously acknowledge precedence for the method by my esteemed friend, Paul Segond of Paris, and not alone to give him credit for it, but to ask that this Association publish a translation of his article, which I here submit, and which I think should have a prominent place in our literature upon gynecologic surgery.

NEW METHOD OF OPERATION FOR RECTO-VAGINAL FISTULA WITH THE PERINEUM INTACT.

DRAWING DOWN AND FIXTURE OF THE RECTAL SEGMENT ABOVE THE FISTULA, AFTER RESECTION OF THE UNDERLYING SEGMENT.

M. PAUL SEGOND.

I have recently observed a case of recto-vaginal fistula whose etiology presents a certain originality. But its really interesting features are to be found elsewhere. The chief motive for its publication is my desire to communicate to others the process I invented for absolutely closing the fistula. Notwithstanding the most unfavorable conditions the occlusion was obtained so well and so quickly that I do not hesitate to pronounce it the best possible method to be employed in similar cases. The facts are as follows:

NARRATION OF SEGOND'S CASE.

My patient is now a robust woman of 31, healthy in mind and body, but when she was a mere child of 15 she and one of her little friends conceived the remarkable idea of introducing pomatum pots into their vaginas. Her companion died soon afterward from peritonitis. As for my patient, after intense suffering, she ended by living in comparative comfort with the foreign body, continually cherishing the hope that a spontaneous expulsion would occur. She married at the age of 19 without saying a word on the subject to her husband. It is superfluous to state what subsequently followed. The fact is, however, that her misery lasted for sixteen years without any other pathologic or matrimonial tribulations, and it was not until April, 1894, that trouble of sufficiently serious nature ensued to necessitate the summoning of a physician. At this time the patient was on her way to Blois, and on April 30 she sent for my friend Dr. Ferrand, who very willingly gave me the notes of which the following is the résumé.

"I found the woman with a temperature of 39 degrees, the featured convulsed and with repeated chills and vomiting. The abdomen was uniformly distended and exceedingly tender to the touch. In short, a diagnosis of peritonitis appeared evident to me, but the patient refusing to allow me to make a more thorough examination, I was obliged to confine myself to purely symptomatic remedies—collodion upon the abdomen and Rivière's potion. The next day and the day after her condition increased more and more in severity, and her husband insisted upon a complete examination. The moment I touched the vagina I discovered the cause of all the trouble. Fifteen years of seclusion had not deprived the pomatum pot of its round and smooth proportions. It was solidly embedded in the posterior cul-de-sac and in the breach it had made in the recto-vaginal wall. I immediately gave the husband to understand that extraction was necessary, and on May 3, with the assistance of my friends, Drs. Hartrusseau and de Mer, I proceded to operate. The patient was chloroformed and the extraction made after the vulva, vagina and rectum had been very carefully cleansed with antiseptics. It was impossible to remove the pot until we had disposed of a large piece of proudflesh that had penetrated its interior, but this done the operation was continued without accident. The recto-vaginal perforation was now, however, seen with all its marked characteristics. It was high up, occupying the entire space at the back of the vaginal cul-de-sac, and its dimensions, combined with the condition of the surrounding parts, were such that I did not venture to attempt anything further. After the day following all adverse symptoms disappeared, and a few days later the patient was up and about. I saw her again on June 23, and, wishing to obviate the continued passage of fecal matter through the vagina, I advised the insertion of Gariel's pessary. The results of this artificial obturation were satisfactory at first, but before long the patient herself perceived the necessity of a complete occlusion, and, at my suggestion, went to Paris Jan. 25, 1895, where she entered the service of my colleague, M. Paul Segond, who operated upon her in my presence on January 31."

THE NATURE OF THE LESION.

Before describing the method I employed in causing the disappearance of the injury confided to my care, I shall endeavor to point out accurately the conditions

Fig. 2.—Showing rectal wall including hemorrhoidal bunches brought down so that fistulous opening through gut is at level with anus. (Dudley.)

presented by the recto-vaginal breach. It was situated high up in the rear portion of the posterior cul-de-sac, and extended over its entire width, resembling a large transverse opening with rough callous edges, and affording free access from the rectum to the vagina and vice versa. The upper edge was formed by the neck of the uterus itself, whose posterior lip was ulcerated and hardened and appeared impregnated with rectal mucus. The lower edge was shaped like a large transverse pad, and its extremities when touched by the fingers produced a sensation of interlaced cicatricial tractus. Uterine catheterization did not reveal any cervical stricture, and the lower lip of the neck was nearly in a healthy state. But in the upper vaginal cul-de-sac could still be seen traces of the transversal ulceration formed at this point by the pomatum pot. All these lesions were readily seen

by means of a speculum, but direct access to the fistula was rather difficult because the uterus, held by the adhesion of the last perimetric (poussie) was not easy to bring down, and, above all, because the perfectly intact perineum presented a most unusual thickness and solidity.

POSSIBILITIES OF VARIOUS OPERATIONS.

In the presence of such a fistula what was to be done? Of course, I could have operated on the entire perineal section and afterward have attempted an immediate colpoperineorrhapy according to Lawson Tait's method. That would certainly have been the preferred mode of procedure in regard to the majority of recto-vaginal fistulas complicated by perineal lesions. But in this particular case the rigidity of the perineum was too marked for me to take any risks. Beside, the size of the fistula was such that, even after the division of the recto-vaginal wall, it would have been impossible to unite the commissures. It was necessary, therefore, to apply some other method, although every known process presented nothing satisfactory to my mind. Suture, after simple freshening of edges, either in vagina or rectum, would certainly have miscarried. Autoplasty by division, according to Sanger's method,[1] with concealed sutures, after the method by Loevenstein[2] upon the rectal orifice, Fritsch's autoplasty by sliding,[3] and particularly Dentu's autoplasty by sliding with superposed strips,[4] were the only methods of direct suture that were capable of tempting me. But, as I have already stated, the neck of the uterus itself formed the upper edge of the fistula. It was as if joined to the corresponding rectal wall, and this fact prevented my attempting any division or sliding. Moreover, the impossibility of bringing the uterus well down made all access to the fistula extremely difficult. Should I have gained any advantage by going through the sacral passages as Heydenreich did?[5] I think not. Although this distinguished surgeon was remarkably successful, the process adopted by him is deserving, according to my opinion, of a mere generalization. I hope, in fact, to demonstrate that a better and much simpler method can be employed, and one which will not produce the results that delayed the recovery of Heydenreich's patient. On the eighth day matter escaped through the sacral wound and complete cicatrization was not obtained in less time than two and a half months.

CHOICE OF AN OPERATION DIFFICULT.

After these successive eliminations two methods remained for me to choose from—that of Félizet[6] and that of Quénu.[7] Either would have enabled me to cure the fistula, no doubt, without touching the perineum. Quénu's process, less summary and more secure than Félizet's, was notably commended to me. He advises, as does Félizet, to proceed by means of the perineal division, with the preconceived idea of suppressing the pernicious influence of escaping gases. But, continuing the work of reparation, he takes care not to sacrifice the posterior layer of the perineal division and closes with proper sutures the vaginal perforation as well as the rectal perforation. He finishes with a submucous section of the sphincter and temporary drainage of the perineal breach. This method might have suited me passably well, yet it did not present the true solution of the difficulty. The recto-vaginal wall once divided, the height of the fistula and my inability to lower the uterus would surely have greatly complicated the correct placing of the stitches. This stumbling-block in regard to the suture, as well as the prospect of a prolonged recovery, would have been possible if not probable, and so much uncertainty was not at all in accord with my designs. It was thus that the following idea occurred to me—to suppress the portion of the rectum situated below the fistula, without compromising either the sphincter or the perineum; take hold of the rectum above the fistula and draw it out and down as far as the anus. Would not this fulfill every indication, destroy the rectal breach without running the risk of a laborious suture, prevent all possible issue of the intestinal contents towards the raw surfaces and produce such conditions that at least a partial cure could be effected during the operation? It was difficult for me not to realize all this, especially as the operative method I wished to employ was in reality nothing more than an exaggerated drawing down of the rectum without which a good colpoperineorrhaphy could not be made. This technical detail is now well known. Pozzi[8] has demonstrated its great importance. I myself[9] called attention to it in reference to a communication from Routier.[10] In every colpoperineorrhaphy extensive mobilization and lowering of the rectum isolate the raw surfaces, permit them to avoid the sutures hidden in the intestine and present definitely the best guarantee of success. Now, I repeat, I did nothing more than apply, in an extremely intensified form, this identical method. It remained to be seen whether the rectum could be drawn down from the level of the fistula to the anus. My assistants appeared to doubt the possibility. But to convince them and gain confidence myself I fortunately had at my command the two following facts: First, in the extirpation of the lower extremity of the rectum for organic affections (stricture or cancer) it is possible to seize the remaining portion of the rectum, bring it forward without opening the peritoneum and pull it down as far as the skin, even when the rectal section above the anus is as long as the index finger. The second point upon which previous experience had given me perfect assurance, was that by means of a rapid and thorough dilatation of the anus an intra-sphincteral rectal extirpation could be performed, followed by a suture of the lowered rectal parts and the skin, allowing the sphincter to resume its functions in all their integrity. Every possible objection being thus removed, I decided upon the experiment I had in view and proceeded thus:

THE METHOD DETERMINED ON.

The patient having been placed in the dorso-sacral position, I made with my fingers a slow, graduated and very complete dilatation of the sphincter; then making a circular incision of the rectal mucous membrane about two or three millimeters above its junction with the skin, I was able to liberate the segment of the rectum to be resected. I must insist upon the necessity of the incision of the rectal mucous membrane a little above its junction with the skin, because if the section is performed lower down, the interior cicatrice will not be sufficiently concealed in the anal depression, the mucous membrane will tend wholly or partly to prolapse, and the patients thereby are greatly incommoded.

The mucous membrane of the rectum once separated from the sphincter by dissection, and the sphincteral zone passed, I seized the entire rectal wall and, using my fingers only, without the assistance of any sharp instrument, I divided the recto-vaginal partition from its very top to the fistula. When I had reached this point I used a bistoury for a moment to cut through the space occupied by the fistula and separate its rectal from its vaginal orifice. Then I continued to set free the anterior wall of the rectum above the fistula by loosening it with my finger-nail from the peritoneum which just there

adheres to it. The separation was easy owing to the fact that the peritoneum, strengthened by the terminal expansion of the large smooth ligaments of the posterior muscular layer, presents the desired thickness and resistance to enable it to be loosened without danger of tearing. In order to facilitate matters, I had taken care to render the uterus immovable and to bring it down as far as possible, using a Museux forceps passed into the vagina, attached to the neck of the uterus and held by one of my assistants.

This done, I found myself in the following situation: the forceps that I have just mentioned held the uterus firmly; two dilators assured the wide opening of the sphincter and gave free play to my eyes and fingers. I had therefore a firm grasp upon the inferior extremity of the rectum, still adherent to nearly all the posterior surface, but entirely separated from the anterior surface. As for the fistula, it was also divided and consequently transformed into two transversal openings, of which one (the vaginal) could be seen on the neck of the uterus

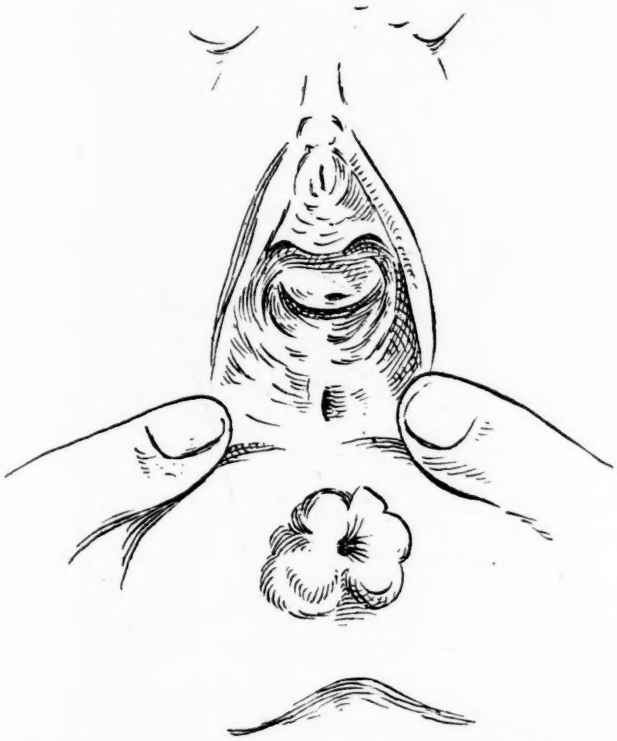

Fig. 3.—Showing fistulous opening through vaginal wall after rectal work is completed. (Dudley.)

at the top of the vaginal wall, while the other (intestinal) followed the lowering of the rectum and was finally resected with it. There was, therefore, nothing simpler than to continue the operation. Grasping alternately with my left hand first the anterior rectal wall which prior to its division formed the upper edge of the fistula, and secondly, the whole of the separated rectal segment, using besides the nail of my right thumb to loosen the tissues, I gradually liberated by means of successive tractions that part of the rectum situated above the fistula until the upper edge of the rectal breach was low enough to be sutured to the anus.

LOWERING A SEGMENT OF THE RECTUM.

The bringing down of the rectal wall must therefore be as complete as possible and its resection made immediately above the level of the breach. But in regard to the lateral parts, and particularly the posterior region, it would have been foolish not to be rather more restricted so as to proportion the resection to the ulterior conformation of the parts by removing just what was necessary to avoid corrugation of the anterior wall. This is precisely what I did. The result was that the rectal segment, brought outside the anus, was much more elevated in front than behind, while the subfistulous section of the rectum was performed in an oblique course from top to bottom and from back to front, passing one way above the fistula and the other way about three centimeters above the posterior-superior edge of the sphincter.

The rectum having been treated in this manner, the operation was practically concluded, and I shall merely enumerate the final particulars which are too simple to be accorded detailed attention. First, a floss-silk suture of the lowered rectum to the anus; in the vagina rapid inspection of the breach representing the last vestige of the fistula and a catgut suture of the lips; small drainage tube placed in the recto-vaginal detachment; finally a simple dressing composed of a strip of iodoform gauze

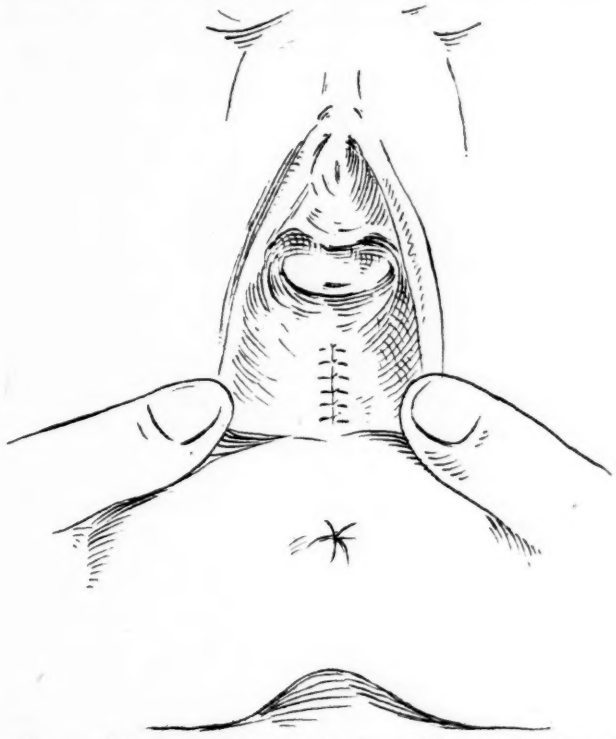

Fig. 4.—Showing fistulous opening in vaginal wall closed with catgut suture. (Dudley.)

placed in the vagina, a rubber tube in the anus to permit the escape of gas, and an antiseptic compress over all.

RESULTS OF THE OPERATION.

The effects of the operation were not complicated, and I may say that the therapeutic results surpassed my expectations. At the end of forty-eight hours I removed the small ante-rectal drainage tube. There was not the slightest rise in the temperature and no constipation, for we provoked daily stools from the day following the operation. The stitches attaching the rectum to the anus were removed in a week's time. At that date the cicatrization was complete, and shortly afterward the patient left me entirely cured. The sphincteral functions had recovered their integrity and the suture was so well hidden in the anal depression that at a first glance it was impossible, so to speak, to discover any traces of the operation. As for the fistula, all that remained of it was the breach in the posterior cul-de-sac sutured with catgut. So far as the recto-vaginal fistula

was concerned, it had wholly disappeared. It had gone with the resected intestinal segment, the sound portion of the rectal wall being drawn like a veil before the vaginal orifice of the old fistula, thus shutting off every communication with the rectum, and had I ventured on a comparison I might have offered a perfect picture of the method employed in the operation by saying that wishing to securely close my first story window I chose the radical means of drawing the shade down to the ground floor and fastening it to the street.

THE NOVEL FEATURES OF THIS METHOD.

This novel operative method just described by me appears worthy of attention. I obtained marvelous results in a case that was not adapted to any of the known classical processes, and I think it susceptible of being generalized. Whoever is capable of the most can surely master the least, and inasmuch as the suppression of a fistula situated on the cervix uteri is possible by drawing down the rectum, it is certain that the same method could be more easily applied should the breach be lower. Whenever the recto-vaginal fistula is sufficiently large and is not accompanied by perineal lesions requiring a special operation themselves, I see no reason why preference should not be given to this manner of procedure.

Fig. 5.—This anterior-posterior cut shows the oblique manner in which the rectum was resected. The rectal segment being raised behind by means of a clamp, the recto-vaginal communication may be perceived in front; it leads to the neck of the uterus which could be plainly seen and also touched by the fingers. Above, a clamp raises the thick peritoneum which lines Douglas' cul-de-sac and which I lowered in order to bring down the rectum. Below, a forceps grasps that portion of the rectum which is to be resected. The rectum is mobilized on its entire surface and passes through the middle of the sphincteral-muscular ring. (Segond.)

The novel application of free mobilization of the rectum combined with a maximum lowering of the anterior wall, appears to lend a special value to the operative method when we consider the treatment of recto-vaginal fistula in its entirety. Whether the rectal lowering completes and protects a colpoperineorrhaphy, or should it comprise in itself the whole operation, its bearing on the case remains the same—it suppresses the fistula. The part it has to play is, therefore, primordial, its efficacy paramount, and frankly speaking, I think that in any case of recto-vaginal fistula an advantage would be gained by first drawing down to the skin of that portion of the rectal wall situated above the fistula. This is always possible. It enables one to dispense with complicated sutures and imperfect or sparing dissections, and I know of no other method that gives such excellent results so surely and simply. Whatever the future may bring forth, I have, I think, demonstrated that in cases analagous to mine the new process that I advise presents an incontestable superiority over all others. Consequently, I deem it important to sum up the method in a few words, and thanks to two illustrations which I owe to my teacher Faraboeuf, I have no fear of confusing my readers.

THE SUCCESSIVE STEPS DETAILED.

The patient being prepared, anesthetized and placed in the dorso-sacral position, the following are the successive details of the operation. (Figs. 5 and 6.)

1. *Dilatation of the anus.*—This should be digital, slow and graduated, cadenced, to use an old expression of Recamier's, and as complete as possible. In proceeding thus the mucous membrane is not broken beneath the touch, easy access is obtained, and finally the sphincter always recovers the integrity of its functions.

2. *Separation by dissection of the intra-anal mucous membrane.*—The circular incision of the anal mucous membrane should be made at about 2 or 3 centimeters above its connection with the skin. This precaution is indispensable in order that the ulterior suture may be well hidden in the anal depression. The mucous membrane having been cut in a circular form, nothing is easier than to dissect it from the top of the sphincter by little clips of the scissors. This done, the sphincter, fully revealed, is held in position by two dilators en-

Fig. 6.—Here the operation is continued. Below, the right half of the sphincter is divided and raised so that the anal suture of the lowered rectal segment is displayed. Above, beneath Douglas' peritoneum which is held up by a clamp, and upon the vaginal passage, may be seen the vaginal orifice of the fistula closed by three stitches made through the vagina. (Segond.)

abling you to grasp the entire thickness of the rectal walls and proceed as follows:

3. *Division of the recto-vaginal wall with mobilization, drawing down the resection of the rectal segment beneath the fistula.*—The division of the wall should be made with the finger and extend to the fistula, without the employment of any sharp instrument whatever. The surface of the fistula is then cut with a bistoury, thus dividing it into two independent orifices, one vaginal, the other rectal. Then grasping with the fingers the anterior rectal wall below its orifice, putting all instruments aside, continue the recto-vaginal dissection, combining it with the lowered rectum by traction until that part of the rectum corresponding to the upper edge of the rectal orifice of the fistula is drawn down far enough to admit of its being sutured to the mucous rim that forms the edge of the anus. To facilitate the mobilization and separation a Museux forceps previously passed into the vagina holds the uterus firmly. The drawing down of the rectum is performed by successive tractions and the perirectal loosening is effected by means of the thumb nail. My observation shows me this method is possible no matter how elevated the

fistula may be, and that the thick peritoneum in Douglas' cavity may be pushed aside without danger of breaking. In proportion as the lowering of the anterior rectal wall is accomplished the lateral and posterior parts of the rectal cylinder will corrugate and project. No attention should be paid to this in the beginning, but when the anterior rectal wall is drawn down to the proper degree, the rectal cylinder should be freed on the sides, then behind, so that it can not corrugate and only the best conditions ensue after the resection of the rectal segment below the fistula. If I make myself clearly understood, it is evident that this resection must be performed obliquely from top to bottom and from front to back, traversing one way the upper edge of the rectal orifice of the fistula, and on the other above the upper posterior edge of the sphincter at a distance varying, of course, with the dimensions of the resection; that is to say, with the position of the fistula.

4. *Suture of the rectum to the anus.*—This suture is made with floss silk according to the usual rules. Although the recto-vaginal division was not extensive, I judged it prudent to insert a small drain which for a few days would receive any liquid that might ooze out.

5. *Suture after freshening the edges of the vaginal orifice of the fistula.*—This suture is made through the vaginal passage. It could have been omitted, inasmuch as the rectal communication no longer existed, having disappeared with the preceding operation, leaving the rectal shade drawn before the vaginal window. It is, however, advisable to close the vaginal orifice with a few catgut stitches in order that the utero-vaginal secretions may not gain access to the wound resulting from the recto-vaginal division.

6. *Dressing.*—The very simple dressing is composed of a strip of iodoform gauze placed in the vagina, a rubber tube placed in the rectum for escaping gas, and an antiseptic compress held in position in front of the ano-vulvular region by a T-bandage. The rectal tube is removed at the first movement of the bowels, the drainage tube at the end of forty-eight hours, and toward the eighth day, when the stitches are taken out, the cure is completed. It goes without saying that daily evacuations of the bowels should be provoked after the first day, no attention being paid to the anal sutures, which, however, must be cleansed after each stool.

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A Hospital Strike.—In these days when strikes are ordered for all kinds of reasons or none, more than ordinary interest attaches to an event which recently occurred in Holland. In one of the infectious disease hospitals at Zaandam the nurses actually fled from the institution, abandoning the inmates to their unfortunate fate. The burgomaster, not knowing what to do, telegraphed to the Convent of the Brothers of St. John, and these good people after little delay arrived and took charge of the infirm.—*Medical Age.*

HIGH AMPUTATION OF THE CERVIX VERSUS HYSTERECTOMY FOR CARCINOMA OF THE CERVIX.*

C. C. FREDERICK, B.S., M.D.
Professor of Clinical Gynecology, University of Buffalo; Surgeon, Buffalo Woman's Hospital.
BUFFALO, N. Y.

The results of hysterectomy for carcinoma of the cervix have been so unsatisfactory in the experience of most operators that the question naturally arises whether there is any necessity of subjecting the woman so suffering to one operation more serious than another, if the lesser one will do as much to ameliorate her suffering, or give her as long a respite from the ravages of the disease as the more serious one.

CERVICAL CANCER TO BE STUDIED ALONE.

Hysterectomy for carcinoma of the body of the uterus, when the malignant process has not invaded the peritoneal covering of the organ or the perimetrium, gives results so satisfactory that no one can question its advisability in every case. The roseate and misleading reports of from 30 to 40 per cent. of non-recurrences after hysterectomy done for carcinoma of the uterus must have included all forms of the disease, those of the body as well as of the cervix. The prognosis is so entirely different that cancer of the cervix must be studied alone. Furthermore, the reports which we so often see in textbooks and current medical literature include in the list of those living without recurrence all the operator's cases, usually within the last few months prior to his report, and who have not yet had time to have a return of the disease. Thus are we misled to believe that the results of operation are better than the facts warrant.

When the disease is reported as recurring from four to six years after operation, the patient being apparently well in the interval, it behooves us to be cautious when we think of pronouncing a patient cured of cancer. Therefore, it is only conservative to say that no woman should be considered as probably cured unless she has lived at least five years and is at the end of this period free from any evidence of the disease.

EVIDENCE FROM STATISTICS.

I have reports from many prominent operators giving their results from this operation. From these data we can formulate a fairly accurate opinion as to the true value of this operation. Out of over 500 hysterectomies for cervical carcinoma these gentlemen report only 12 who have lived five years or more without recurrence, the oldest being ten years. Several are reported still alive from one to four years after operation, but they evidently are not yet past the danger period.

It is possible, too, that some of these who are alive without recurrence did not have cancer of the cervix. If I may be permitted, I will quote a remark from Dr. Hunter Robb in a recent letter on this subject to justify the above: "I have been forced to the conclusion that in many cases in which the uterus has been removed for cancer of the cervix, and which has not been followed by a recurrence of the disease, that the original condition was not a malignant one. I have examined a number of specimens in which a diagnosis of malignancy was made prior to and at the time of the operation, but which, on careful microscopic examination, there were no evidences of a malignant growth."

* Read at the Fifty-third Annual Meeting of the American Medical Association, in the Section on Obstetrics and Diseases of Women, and approved for publication by the Executive Committee: Drs. A. H. Cordier, W. E. B. Davis and Henry P. Newman.

RECURRENCE IS IN THE SCAR.

Much has been written in the past advising the removal of infected pelvic lymphatic vessels and glands at the time of operation. It is the universal experience that recurrence makes its appearance in the vaginal vault at the site of the scar and rapidly infiltrates the adjacent vaginal wall. Removal of the pelvic lymph glands therefore does not insure against recurrences.

No doubt many hysterectomies have been done in the past when the process was too far advanced to be classified as operable. No case in which the growth has passed the limits of the cervix can be an operable one—at least hysterectomy is not justifiable, except as a palliative operation, and high amputation of the cervix is the preferable procedure. The only argument which could be given to justify hysterectomy is that the recurrence will probably be accompanied with less hemorrhage and less fetid discharge.

THE SITES OF EXTENSION.

The deeper tissues of the cervix are generally invaded first, and also the deeper layers of the vagina in the immediate vicinity of the cervix are infected before the disease appears upon the mucous surface. We therefore are never certain till we begin to operate just how far the cancerous process has gone. Usually there is much more involved than we thought on digital or ocular examination. Cullen in his work on "Cancer of the Uterus" calls attention to the fact that "the disease may have extended far laterally, and yet on palpation no thickening be detected. This lateral involvement is often demonstrable only with the aid of the microscope."

The bladder wall is very early infected, especially when the anterior lip of the cervix is the starting-point of the growth. The squamous-celled carcinoma bleeds earlier than does the adeno-carcinoma. Hence we are liable to see the former much earlier than the latter, and do an operation at an earlier and more favorable period. The adeno-carcinoma is a much firmer growth, does not bleed early, and, according to Cullen, is liable to become inoperable before its existence is suspected. Fortunately, the friable squamous-celled carcinoma is the most frequent one we meet.

DIFFICULTY OF PROGNOSIS.

Out of nearly 100 cases of carcinoma of the cervix which I have seen only 26 were considered favorable for hysterectomy, the balance being too far advanced to do anything but the various palliative operations. Curetting and trimming out the cancerous tissue, cauterizing the surfaces, and later, in some instances, using carbid of calcium, have given results in some which have totally eclipsed hysterectomy in other cases which seemed favorable for a cure by removal of all the disease. Positively recurrence and death have been more rapid in some apparently so favorable than in others, who have come to me with a vagina filled with a sloughing, fetid, bleeding mass.

THE AUTHOR'S EXPERIENCE.

Of the 26 which seemed favorable for hysterectomy, I did 14 hysterectomies and 12 high amputations of the cervix. Of the 14 hysterectomies all are dead or have a recurrence except one, and she was operated on seven years ago and is still well. Those on whom I did high amputation are either dead or have a recurrence. The period of recurrence after either operation has been from a few months to three years. Of the recurrences in the 500 reported above, a large percentage have recurred before three years.

In view of my unfavorable experience with hysterectomy, and having had two deaths, one from shock and the other from septic peritonitis, I decided to try high cervical amputation in operable cases. I have every reason to be as well pleased with its results as with the radical operation. Two have lived two and a half and one three years before recurrence took place. None of my hysterectomies, save the one seven years old, have lived over two years without a return of the cancer. Those upon whom I did high amputation were not more favorable for operation than those formerly operated on by total extirpation. We have every reason to put very little faith in the ultimate results following hysterectomy. If high amputation of the cervix will give as long a respite as the more radical operation, why is it not preferable? It certainly is not so dangerous a procedure. Of the 500 above reported about 10 per cent. died from the operation, the causes being shock, septic peritonitis, prolapse of the bowels in clamp operation, etc. All of these complications are avoided in high amputation, for the peritoneum is not opened. If the body of the uterus is not infected with carcinoma, and Cullen says it seldom is found to be, why do we not remove as much diseased tissue in a high amputation as we do in a hysterectomy? The return will be in the scar at the former site of the diseased cervix, whether the body of the uterus above is taken out or left.

SOME DETAILS OF THE OPERATION.

The operation is done in all respects as in vaginal hysterectomy up to the point when we open into the peritoneum in the latter operation. The bladder is pushed up and freed to the vesico-uterine peritoneal fold. The peritoneum of Douglas' pouch is stripped from the posterior uterine wall as far as possible. The uterine arteries are then tied and cut, and the cervix amputated as high as possible without opening either the anterior or posterior peritoneal fold. The amputation may be done either with the cautery or knife. It has happened that when the site of the cervix has been packed with gauze and allowed to fill with granulation tissue, that the uterine canal has either been occluded or so stenosed as to produce painful menstruation. To avoid this the free edge of the vagina may be sewed to the edge of the uterine canal, thus preventing the encroachment of granulation tissue upon the uterine canal. This can not be so successfully avoided if the amputation is made with the cautery.

Dr. J. G. Clark reports one excellent result from high amputation, but he used the cautery and the patient has dysmenorrhea. Dr. Hunter Robb reports one case operated upon six years ago by high amputation, and he has operated for a recurrence within the past four months. Others have reported high amputations years ago, but as they had recurrences of the cancer they evidently blamed the operation and abandoned it for total extirpation. Some of these same men now confess that they are not so sure but that high amputation will give as good results as hysterectomy.

ADVANTAGES OF THE CERVICAL METHOD.

The operation is much easier to do than a vaginal hysterectomy, it takes less time, the peritoneum is not opened, the dangers of peritonitis are avoided, the mortality is almost if not entirely nil, the patient makes a more rapid convalescence, with less constitutional disturbance, and in my experience the results are as good as with hysterectomy, although limited to twelve cases. The truth can only be ascertained and its true status fixed by resorting to it in a number of cases sufficiently

large during an extended period, and then compare the results with those of hysterectomy.

64 Richmond Avenue.

OPERATION FOR RECURRENCE OF CANCER AFTER HYSTERECTOMY.*

E. W. CUSHING, M.D.

Professor of Abdominal Surgery and Gynecology, Tufts University.

BOSTON, MASS.

FREQUENCY OF RECURRENCE.

Sad and discouraging is the fact that a very large number of cases of cancer of the uterus recur after a variable time subsequent to the removal of the organ by hysterectomy. Nevertheless, this is not a reason for abandoning the operation, which certainly saves a great many cases, prolongs the life of more and mitigates the sufferings and grants a comparative euthanasia to the rest.

Early diagnosis, immediate surgical interference and more thorough methods of operating are constantly giving better results. Just as in mammary cancer the modern methods of removing the contents of the axilla and all the tissues between the axillary glands and the mamma, together with the subjacent muscles, as well as the whole breast and overlying skin, have vastly improved the final results, so the thorough operation for hysterectomy in cases of cancer, with dissection of the space at the bifurcation of the iliac arteries, removal of the glands and lymphatics, liberation of the ureters, complete ablation of the bases of the broad ligaments and avoidance of infection of the cut surfaces by finally removing the uterus through the vagina, after it has been liberated and all vessels ligated from above through the abdominal incision, will give vastly better final results in cancer of the uterus.

PROBABLE RECURRENCE NOT A CONTRA-INDICATION.

I would insist, however, that even in cases in which the diagnosis has not been made so early as could be desired, or in which the condition of the patient, or the skill of the operator does not admit of the improved and thorough operation as described above, the ordinary methods of hysterectomy will give results which fully justify an operation in all cases in which the whole of the disease can apparently be removed. If in too many cases there is a recurrence, when it is not expected, yet in others in which recurrence seems inevitable, it does not occur, and I have patients operated on ten or twelve years ago for undoubted cancer of the cervix uteri, who are alive and well to-day, although the operation was difficult owing to considerable progress of the malady.

There is abundance of evidence to show that there are resources of nature which combat the cancerous infection, and sometimes they overcome it, although too often they fail, even when the principal seat of the disease has been removed. Presumably, however, the cases in which there is no recurrence are those in which, although the growth is exuberant or the uterus deeply ulcerated, there is no infection of the lymphatics and the vaginal incision has not been infected at the time of operation.

In the other cases, after a variable time from a few weeks to several years, the dread disease is found to have persisted and is manifested either by a failing of the general health, owing to a so-called metastasis to some of the vital organs; in which case, of course, nothing can be done to oppose it, or there is found a hardening and thickening in the roof of the vagina, or a mass in one or both broad ligaments.

COMMON TREATMENT OF RECURRENCE.

Now, these cases of local recurrence, or persistence, are considered so hopeless that little or nothing is done to attempt to arrest the disease. Patients are not kept under proper surveillance after hysterectomy, examinations are not made with the object of detecting the first manifestations of the disease and if perchance the patient is warned by discharge or hemorrhage and comes to consult the surgeon, it is only rarely that some help is offered in the way of exsecting or cauterizing some small point in the line of the previous incision, while if there is a mass, even a small one, in the broad ligament, no hope is usually held out that anything further can be done.

Meanwhile the patient is often in better condition, physically, than at the time of the original operation. Months or years of freedom from the wasting discharges and from the absorption of putrid matters have allowed her to gather strength, the desire of life has grown strong again and the disappointment at finding that all previous surgical interference has been in vain is doubly cruel and intolerable.

I have seen too many such cases, both after operations of my own and of others, and too often I have sadly pronounced the words of doom to disheartened relatives or evaded a direct answer to the patient, wishing to leave her a little more time for hope and enjoyment of life.

Some years ago I saw a lady in whom five years after hysterectomy for cancer there was a slight hemorrhage, and examination showed a mass as large as an almond in the right broad ligament connected with a little granulating point in the right angle of the scar in the vault of the vagina. Last spring and summer I watched the life ebb slowly away from the wife of a physician from recurrence in the vaginal incision nearly a year after hysterectomy had been performed by another surgeon for cancer. I made an attempt to remove the diseased tissue from the vault of the vagina, as a palliative measure, but knew that the benefit would only be temporary, because under ether I could trace the infection running up into one broad ligament.

REMOVAL OF A RECURRING CANCER.

I then determined that if a suitable case occurred to me I would perform a radical operation through the abdominal wall, modeling it on the modern operation for cancer of the uterus. (Rumpf-Riess-Clark-Werner-Pryor.) Therefore, last January I operated accordingly on the following case:

History.—Mrs. M., aged 58, in good health, notices slight hemorrhage and discharge in May, 1901. The uterus was curetted and the specimen pronounced malignant by Dr. Whitney, and more complete examination of the uterus after removal showed that the growth was an adenocarcinoma of the cervix.

Initial Operation.—In July, 1901, the uterus was removed by a very competent surgeon, who first curetted and made an incision around the cervix in the vagina and then opened the abdomen and removed the uterus. Convalescence normal. Great subsequent improvement in health and strength.

Recurrence.—Six months afterward, in January, 1902, the patient was surprised and distressed at finding that she had a slight bloody discharge. I was consulted and found at each end of the scar in the vault of the vagina a small patch of granulations, each patch being about half as large as the little finger-nail and evidently malignant. Bimanual examination, especially when made per rectum, disclosed a small elongated mass, most marked on the right side, extending outward and

* Read at the Fifty-third Annual Meeting of the American Medical Association, in the Section on Obstetrics and Diseases of Women, and approved for publication by the Executive Committee: Drs. A. H. Cordier, W. E. B. Davis and Henry P. Newman.

upward and obviously lying in the stumps of the broad ligaments.

It was plain that the whole of the disease could not be removed per vaginam without the greatest danger to the ureters and then with no certainty as to the completeness of the eradication of the infected tissues. The whole situation was explained to the patient and her husband and, without hesitation, they demanded the most thorough operation that could be performed, assuming all risks of a fatal result of the operation and holding such a death an event preferable to that of a miserable wasting away with a hopeless disease.

Second Operation.—On opening the abdomen it was at first impossible to keep all the intestines out of the pelvis, although the patient was in the full Trendelenburg position, therefore some part of them was kept in hot wet cloths on the surface of the abdomen, until a little later in the operation, when it was returned into the abdominal cavity. There were very few adhesions; the round ligaments ran to the stumps of the infundibulo-pelvic ligaments, making a band on each side of the pelvis, with a little mass on each side where the silk ligatures on the ovarian arteries were felt beneath the surface. The stumps of the broad ligaments could be felt, somewhat thickened, and with the ligatures likewise in place.

An incision was made across the bladder, about one centimeter above the scar of the former incision and with great care and some difficulty the bladder was dissected free from the tissues of the vagina. As there was much cicatricial substance in this locality this dissection was rather obscure, and was not carried very far at this time from fear of wounding the ureters.

Next the peritoneum was divided on the right side from the end of the incision over the bladder, passing above the stump of the broad ligament and below the stump of the ovarian artery as far as the brim of the pelvis. The bifurcation of the iliac arteries, and the course of the ureter in this vicinity was now exposed. At the junction of the arteries were some glands, one of which was three millimeters in diameter and another somewhat smaller. The glands and all adjacent tissues were very carefully removed, and the ureter was traced and separated as far down as where it passed into the broad ligament. Here trouble began as the ligature on the uterine artery was very close to the ureter, and in trying to dissect out the latter it was mistaken for the former and cut. The distal end was immediately found, however, and the dissection of the ureter continued until it was free from the broad ligament and near its entrance to the bladder.

The uterine artery was next followed to near its origin and there tied, when the whole of the right side of the pelvis was cleared out much as the axilla is emptied in the corresponding dissection for mammary cancer.

The severed ureter was now repaired by Van Hook's method, carrying the proximal end into a slit in the side of the distal portion, near the extremity of the latter. I regretted that bougies had not been introduced into the ureters before the operation, which would have prevented the accident to the ureter. I had omitted this precaution from a desire to save the additional time under ether, as the patient was neither young nor very strong. I believe, however, that with experience and care and by beginning at the junction of the iliac arteries the ureters can be safely dissected out, without the use of bougies, although there are obvious and great advantages in using them.

The next step of the operation was to carry an incision through the peritoneum on the left side, similar to the one described on the right side, as far as the junction of the iliac arteries. Similarly the glands were removed, although they were much smaller, the ureter was carefully dissected out to the base of the bladder and lifted out of the way, the uterine artery traced and tied at the side of the pelvis and the broad ligament and other pelvic contents separated.

An incision of the peritoneum was now run across between the old scar and the rectum, when the top of the vagina was seized and drawn up as far as possible, and rapidly freed from the rectum and the bladder and cut across below the seat of recurrence.

By this time the patient's strength seemed to be failing, and without waiting to unite the incisions in the peritoneum, a thickly-folded piece of gauze was drawn from above downward through the vagina, the upper end extending just into the pelvis.

The ureters were laid as far as possible in their normal positions and the peritoneum drawn into place and a Miculicz pack of moderate dimensions introduced through the abdominal incision, which was then closed around the gauze. Duration of operation one and one-half hours.

Results.—Recovery uneventful; slight leakage of urine through the abdominal incision after removal of the pack. This fistula has not yet entirely closed, but sometimes it closes for a week or more and then will reopen and allow a little urine to escape. General health excellent six months after the operation. No recurrence locally.

COMMENTS ON THE CASE.

From my experience in this case I see no advantage in Van Hook's method of uniting the ureter over the end-to-end method which I used in my previous case of severed ureter, reported to the Philadelphia Obstetrical Society in 1893. If I ever have another case I shall use the modification which I have found of service in uniting the ureter with the bladder through the vagina, viz., to do it over a catheter. I would therefore pass a catheter down through the distal portion of the severed ureter into the bladder and out through the urethra, and slip the upper end of the catheter into the proximal end of the ureter and unite the latter carefully end to end over the catheter, which can safely remain in place for a week or more.

To avoid as far as possible all chance of infection recurrence in the case of this patient, three weeks after the operation, the vault of the vagina all around the cicatrix was dissected away and the edges of the wound united with catgut, thus removing the tissues as widely as I would have done at the first operation had the strength of the patient permitted.

I have reported the steps of this operation somewhat at length because I have not been able to find a report of any radical operation for removal of cancer, recurrent or persistent, after hysterectomy, and because the absence of the uterus and the presence of ligatures and cicatricial tissue confuse the natural relation of the parts and render the dissection more difficult. Nevertheless, if a close supervision is exercised over patients after hysterectomy a large number of cases will be found in which such an operation is indicated and warranted.

Of course, when the radical operation has been done in the first place, there will be no probability that anything can be accomplished by a subsequent operation, but I think that recurrences will be rarer in proportion, as the first operation is more thoroughly and carefully performed. It will be a long time yet, however, before the radical primary operation will be the rule, for many surgeons will be disinclined to perform it, and in many patients the conditions will not warrant it, owing to weakness from hemorrhage, discharges, etc.

When, under these circumstances, the disease is found to have manifested itself at a subsequent examination, I feel sure that such an operation as is here reported will be found feasible and indicated. I hope that my experience in this case may encourage others to attempt to save some of the unfortunate and hopeless women who in the past have been considered as inevitably doomed.

EXAMINATION OF TISSUES REMOVED.

Following is a report by Prof. T. L. Leary on the tissues removed from Mrs. M. at Cushing Hospital:

Pathology.—Specimens consisted of vault of vagina with stumps of broad ligaments and pelvic connective tissue; portions of right round ligament which had been included in the ligatures at previous operation; pelvic fat tissue from region of iliac arteries and iliac lymph nodes.

The great mass of tissue is attached to the vaginal vault. The vaginal mucosa presents a smooth surface, concave—5x3 cm.—showing on either side of the middle line bilaterally—about 3 cm. apart—two dimple-like depressions.

From the right one projects a fungous growth of rather flattened papillary masses which stand up .5 cm. above from smooth vaginal surface. The other shows only a conical depression ending in a pin-head opening which admits a small probe for 1.5 cm.

Microscopic Examination.—Section through fungous growth on right shows a mass of reddish-gray soft tissue, continuous with the papillary growth and extending for some distance into the surrounding tissues from which it is easily distinguished on account of its darker color and softer consistency. This growth is apparently wholly included within the tissue removed.

Incision along a probe introduced into opening on left side of vault lays open a canal lined by flattened masses of soft tissue corresponding to that described on right side. This tissue extends well beyond the limits of canal admitting probe and into the scar tissue and pelvic connective tissue above vault. As on the other side, all of growth is apparently included in tissues removed.

The upper portion of the mass (i. e., above vaginal vault), as well as the tissues included with fragments of right round ligament, contain many large braided silk sutures imbedded in dense scar tissue.

Most of the iliac fat as well as the lymph-nodes imbedded in it are free from gross evidence of any new growth. A single iliac node removed just below the bifurcation of the common iliac artery is enlarged to the size of a split pea, is firm and of a pale gray color.

Microscopic examination of sections of papillary growth on right side show it to be made up of broad masses of epithelial cells, which occur for the most part in branching trabeculæ running at right angles with the surface. Many of these trabeculæ enclose spaces which suggest gland cavities. Much of the tissue on the exposed surface (vaginal) of growth has undergone necrosis—the cells stain poorly and there is an acute inflammatory reaction. The junction of new growth with normal tissues is marked by collection of lymphoid and plasma cells. Gross sections about 3 mm. apart were made from all of the suspicious tissues about vaginal vault. Microscopic sections from these show in every case where new growth was included, a picture corresponding to that described above. The growth is apparently sharply localized, since no metastases are discoverable in the tissues outside of the main tumor masses. The tissues excised show everywhere a considerable margin of normal tissue outside of new growth. At one point on left side, where in gross it appeared to be questionable whether a sufficiently wide margin of normal tissue had been obtained, microscopic examination demonstrates a larger amount of normal tissue outside of tumor tissue than had been expected.

Microscopic examination of sections from pelvic fat and the tissues of broad ligaments shows no metastases even lymphatic. Microscopic examination of twelve sections representing about 150 sections through iliac lymph node shows dilatation of lymph sinuses, which are filled with granular material (coagulated lymph?), and slight hyperplasia of follicles. There is absolutely no evidence of metastases in the node.

NARRATION OF SECOND CASE.

CASE 2.—Mrs. Y., aged 50, had the uterus and appendages removed by me five years ago, for carcinoma, by vaginal hysterectomy. Since that time she has enjoyed good health until some six months ago, when she began to complain of pain in the left side, and of some difficulty in walking. Within a month she had a slight hemorrhage and consulted a physician who told her that the disease was coming back, and advised her to see me again.

On examination there is a movable mass in the left angle of the cicatrix of the former incision, with a small sprouting growth of malignant tissue. The mass is about two cm. in diameter, slightly attached to the mucous membrane and apparently pretty free in the connective tissue above.

There are very large veins in the left hypogastric region of the skin of the abdomen, the importance of which was recognized, but on the whole it seemed best to open the abdomen. When this was done the right side was found to be wholly normal. The mass on the left felt on preliminary examination could have been removed as in the previous case, but higher up, at the junction of the iliac arteries, there was a larger mass, immovable and intimately connected with the ureter and the internal iliac vein, which last was occluded, while the mass encroached on the external iliac vein so that to remove the growth it would have been necessary to splice the ureter and to tie the common iliac vein, with no certainty that it would have been possible to respect the artery.

While surgically it might have been possible to remove the mass, yet in view of its malignant nature it seemed better to desist from further operative attempts, as I accordingly reluctantly did. The patient is now slowly failing, some three months after the exploration.

I report the case in view of the interesting symptom of collateral circulation through the superficial veins, and from the light it throws on the progress of the disease.

DISCUSSION

ON THE PAPERS OF DRS. FREDERICK AND CUSHING.

DR. G. B. MASSEY, Philadelphia—*Mr. Chairman:* I do not think that the report of a few cases of hysterectomy for cancer where the microscope failed to reveal malignant disease should discourage an attempt to cure it by its early removal. Better remove some normal uteri than risk delay. But I again want to call attention to what I regard as a better operation for cancer of the cervix, one which is applicable to the primary condition, and also as a palliative remedy in cases of recurrence. I have not used this method in more than six cases, only one of which was primary and operable. That case is still living after five years. The diagnosis was verified by the microscope and concurred in by the late Dr. Parvin of Philadelphia. The other cases were cases of recurrence, and none were cured, although palliation was marked. I do not use the knife, but the method is surgical in the strictest sense of the word, and there is even a mortality attached to it, I regret to say. The method is absolutely aseptic and antiseptic. It is a modification of the cancer method which I brought before the profession first about seven years ago. The electric salts of mercury manufactured by electrolysis on a massive scale inside the patient's body are used to destroy the tissues and sterilize the surrounding region. The modification consists in the use of zinc points coated with mercury, because it is practically impossible to keep liquid mercury in contact with gold instruments in the place where you want it in these cases. The material formed is a nascent oxychlorid of mercury and zinc, and all who have used the chlorid of zinc as a mere contact remedy know of its caustic qualities. In this process the nascent salts are diffused through the tissues by electric osmosis, the current sending it along the lines of least electric resistance, which are the lines of greatest cellular proliferation. One application will destroy the odor for fourteen days absolutely. It is bloodless, and thoroughly sterilizes the tissues. Whether we can cure inoperable cases by frequent repetition remains to be seen. One advantage of this method over the curette in these hopeless cases is that not a drop of blood is lost. The blood vessels are closed up and the patient gains color inside of a week, because she is no longer absorbing septic material, and is regaining her accustomed vigor. In my five recurrent, inoperable

cases life was prolonged, with immense increase of comfort, from three to six months.

DR. E. E. MONTGOMERY, Philadelphia—Every contribution on this subject made as carefully as that with which Dr. Frederick has favored us is of value in throwing light on a disease which so far is the most difficult the surgeon is called on to treat. While the statistics he has given us go to show that amputation of the cervix is a desirable procedure, yet my own experience convinces me that it is desirable to get rid not only of the cervix but of the entire organ. It is true that we find, in the great majority of cases, that the disease returns in the vagina, sometimes extends and involves the tissues some distance from the line of the cicatrix, just as the surgeon finds in the removal of the breast, although the glands in the axilla are extirpated, the disease subsequently returns in the skin, either in the cicatrix or near it. This is due to the fact that in the development of the disease in the cervix we have some of the lymphatics plugged, but the tissue being very rich in lymphatics, the current is carried in another direction, and we have a subsequent recurrence of the disease in a new field. No matter whether we amputate the cervix or remove the entire organ, the disease invariably recurs in this way.

With regard to the squamous disease, my own experience has been that, with careful attention to getting well beyond the disease to prevent a re-infection by portions of material that may be left behind or fragments that may be broken off and subsequently come in contact with the wound, that it is the most amenable form of disease with which we have to deal. The glandular variety begins in the cervical canal, rapidly penetrates the wall of the cervix, and the perimetric tissue soon becomes involved. The tendency to re-development is very marked in these cases in spite of any operation that may be done.

In either class of cases I believe the cautery is more applicable simply because heat has a tendency to destroy or arrest the development of the disease in the tissues which are well supplied with blood. The diseased tissue is affected more by the heat than the connective tissue, and we may look forward to a more thorough removal and longer lapse of time before its return than with the ordinary method—the use of the knife and scissors. The fact has been mentioned that in the high operation we have the formation of granulation tissue and great care must be exercised in bringing together the uterus and the vaginal mucous membrane. The formation of cicatricial tissue, the occurrence of dysmenorrhea or the retention of secretion in the uterine canal, with increased discomfort to the individual, would seem to me sufficient reason why we should remove the entire uterus.

With reference to the danger connected with any operation, in the hands of operators as careful as Dr. Frederick, I doubt whether there is a greater mortality in hysterectomy than in amputation of the cervix.

I wish to express my high appreciation of Dr. Frederick's paper, and I am convinced that if more of us would exercise the same care we would greatly advance the study of this subject.

DR. CHARLES P. NOBLE, Philadelphia—I can not but appreciate Dr. Frederick's paper, although I am not such a pessimist as he. I think cancer is the most terrible disease we have to deal with. During the last year I tabulated my own results in dealing with cancer, from the standpoint of how many cases had recurrence after operation, including both cancer of the uterus and the cervix, and 20 per cent. remained free from recurrence for five years. That included a large number of cases of cancer of the body in which the prognosis was much more favorable than in cancer of the cervix. In operable cancer of the cervix we can, with the present methods, have at least 10 per cent. of cures, taking five years as a basis, and I think we can improve on that very much. Of course, this subject is being studied very widely, and our German friends have given us very encouraging reports in the last year.

My own feeling about the question of how to deal with cancer of the cervix is that in early cases we should do a very radical operation and then we would get a very high percentage of cures. It is in cases that approach the borderline where my personal experience has been that we get a high mortality in doing hysterectomy, and in future I shall do a more radical operation on the early and the temporizing operations in cases approaching the border-line, either amputating the cervix or burning out the mass with the cautery or electro-thermic clamp, and then, when the patient recovers and her vital resistance is better, I will do a radical hysterectomy. I believe hysterectomy is the operation of choice, unless the bacteriologists can give us some serum to use in these cases. If the patient is in good condition, we should be radical. In broken-down cases it is my judgment that the good name of surgery will be conserved by doing a temporizing operation.

DR. WILLIAM H. HUMISTON, Cleveland, Ohio—This is a subject in which I am very much interested, and I will add my experience in the treatment of carcinoma of the uterus by operative measures. I have been engaged in operative work for the past fourteen years and I have not one case of carcinoma of the cervix alive to-day on which I performed a radical operation where the symptoms—hemorrhage, pain, and an odorous discharge—were present.

The cases we see, as a rule, have been progressing until these symptoms appear, and I believe these cases always recur after operation. Cases that permit of a conserving operation live anywhere from three months to a year.

One of my most interesting cases was a young married woman of twenty-eight, who had been treated for some time, for a so-called ulceration of the os, by caustic applications. When she came under my care there was a very suspicious-looking cervix, uterus fixed, masses in both vaginal vaults, and I believed that she had a malignant disease of the cervix, as well as pus in the tubes. I took out a section of the cervix for microscopic examination and carcinoma was diagnosed.

Being a young woman and having this pus formation in the pelvis, a rare and unique condition in my experience, I advised total hysterectomy, which was consented to. I removed the cervix first and curetted the body, swabbing it thoroughly with the compound tincture of iodin and carbolic acid. I then removed the uterus. She recovered promptly, but within six months nodules were felt in the line of incision and in the inguinal region above.

In this young case, then, where the disease was apparently limited to the cervix, and where the hemorrhage and odorous discharge were slight, she did not live a year. We must have these cases very early if operation is to be successful.

Every suspicious cervix must be examined microscopically, and operated on before we have the trinity of symptoms, pain, hemorrhage and odorous discharge. On the other hand, my success with malignant disease of the body of the uterus has been phenomenal.

In all these cases that have been discovered by microscopically examining scrapings of the uterus, a procedure I never fail to carry out—and where an hysterectomy is done promptly— every one of them is alive to-day.

DR. L. H. DUNNING, Indianapolis—I am surprised to hear the high rate of mortality given by one of the speakers, because it has a tendency to discourage all other operators. It has a tendency to bring disrepute on an operation which, if it is not life-saving in many cases, is palliative in very many. My own experience shows that in cancer of the cervix, where the uterus is freely movable, at least 15 per cent. of the patients survive five years. I must say, however, that the five-year limit does not always indicate that there will be no recurrence. I have had two patients who had been placed in the list of cures, who died from recurrence, one after six years, and the other after seven years. So I think we ought to be careful not to let it appear that every case operated on by hysterectomy dies of cancer, as from 10 to 15 per cent. are usually cured.

Again, I do not believe that we ought to allow it to appear that the operation of high amputation of the cervix is attended by little or no mortality. You will remember Schroeder's statistics some twelve or fifteen years ago, which showed a mortality of 9.6 per cent. from high amputation of the

cervix. We must also remember the character of the cases operated on, a point which was brought out admirably by Dr. Montgomery. Cases involving the vaginal portion of the cervix only are those that should receive a high amputation. Those cases in which the cancer develops between the external and internal ora are unfavorable for this operation. Those who do hysterectomies, will remember their experience in dealing with these cases. You attach the vulsellum forceps and attempt to pull down the uterus. In many cases you pull off the cervix, thus embarrassing the whole operation. You must also remember how very high up the disease extends on either side of the cervix. Those are exceedingly unfavorable cases for high amputation. They recur very rapidly, and the mortality is high. The curette can not be used, nor can we use the thermo-cautery with any degree of safety. Even hysterectomy should not be done in these cases unless the uterus be freely movable.

In about 10 per cent. of the cases of cancer of the uterus we will have involvement of the uterine appendages, and this may be of considerable importance, for the reason that if our patient survives six months or a year we wish to give her as much comfort as possible. If we leave behind a pus tube or an inflamed ovary, we can not give that patient the greatest degree of comfort. About fifteen years ago I advocated high amputation, but I gradually worked out of that. One of the things that led me to adopt a different plan of treatment was that where we did a total extirpation, with removal of tubes and ovaries, not only as many cases recovered, but the future condition of the patient was very much better. They suffer less, gain strength more rapidly, and have no painful menstruation. I think we should be very loth, indeed, to ignore the lesson we learned ten or twelve years ago, that we have fewer recurrences after a total extirpation, and greater comfort to the patient.

DR. GUSTAV KOLISCHER, Chicago—In discussing such an important subject as cancer of the uterus, it is very important not to deal in generalities but to use exact figures and terms to bring forth exact facts. Cancer of the cervix, for instance, is to-day an absolutely insufficient and rather unscientific term. We must distinguish between cancer of that part of the cervix which protrudes into the vagina and the part intermediate between the portio vaginalis and the uterine body. The importance of this distinction is especially shown by Winter. Cancer in the upper part of the cervix is more dangerous because the envolvement of the parametric tissue sets in quite early. Secondly, it is necessary to understand that under the term recurrence two entirely different conditions are thrown together. Recurrence is the development of cancer from cancer cells which have been left outside the reach of the operation. The appearance of cancer in the vaginal superficial tissue, for instance, is not a recurrence but the appearance of cancer inoculation. This inoculation is due to imperfect technic, that is insufficient covering up of the exulcerated part of the carcinoma. Poor technic is also to be held responsible for some recurrences, because the operation did not extend far enough into the parametric tissue. Many operators making a hysterectomy do not try to remove as much parametric tissue as possible, but try to get through as quick as possible. In such cases, you can judge the technic of the operator simply by looking at the specimen. The removed uterus looks like a peeled off piece of a sausage instead of carrying the parametria on both sides, like wings. The same is true of the clamp operation. We lose too much space, space which ought to be used for applying ligatures as close as possible to the pelvic frame. The supposition that the heat of an electric clamp destroys cancerous cells in the adjacent tissue shows an optimism which is not justified by the results of igni-extirpation of the cancerous uterus. So far as envolvement of the bladder is concerned, Dr. Frederick said that the bladder wall becomes envolved early. This statement is erroneous. As a rule, it is the last tissue which is invaded. In about 150 cases of inoperable carcinoma, which I examined, the bladder was envolved in only 15 cases. As to mortality immediately following hysterectomy for cancer, it is undoubtedly high. The best operators report the total mortality as 10 per cent. The necessity of removing the uterus in all cases of cancer, no matter where it is located, becomes apparent from the following consideration: There are cases on record where cancer of the cervix or portio was combined with cancer of the uterine body.

Second, we know of cases where, after hysterectomy was performed, cancer developed in the appendages which were left. Recurrences do not appear in the vaginal scar but in the parametric tissue or in the lymphatic glands, so we have no reason whatever to return to the excision of the cervix, but we have to make hysterectomy, including the appendages, after methods which allow of extensive removal of the parametric tissue; that is, performing vaginal hysterectomy, using Schuchardt's incision, or the first by Ries' proposed abdominal operation. So far as statistics of recurrence after vaginal hysterectomy for a cancer of the cervix and portio are concerned, Winter, whose statistics are recognized as the best ones, reports between 5 and 15 per cent. of definite cures, according to the kind of cases. As to Dr. Cushing's case, his intention to try to operate for a recurrence if we can is undoubtedly a good one. So far as his diagnosis is concerned, I am rather inclined to think that in his case not a cancerous recurrence was present but an inflammatory infiltration. For this view speaks the short time which the formation of the tumor took and the ease with which the operation could be performed. If we make laparotomy for cancer of the uterus and find that the neoplastic infiltration extends into the ligament it is next to impossible to finish the operation.

DR. W. H. WATHEN, Louisville—I want to disapprove of high cervix amputation for cancer, or any operation that is not radical; remove not only the entire organ, but as much tissue beyond as can be removed without injuring the ureters and surrounding structures. Where permanent cures are so frequently reported in high amputations, I can not believe that the reports have been accurately taken. I am sure there was a mistake in diagnosis in most of these cases. The term cancer of the uterus is a very vague one. We must consider it as involving the cervix, and extending up into the uterus or out in the broad ligaments, or a cancer that is protruding into the vagina, without deep involvement of any other structure. In the first instance, if the disease has gone beyond the parenchymatous structures into the broad ligaments, it does not matter what operation we perform, 99 per cent. will recur. If it has not gone beyond the parenchymatous structures, or if it is confined mainly to mucous structures, it may not recur if operated on promptly. If protruding into the vagina many cases will recover if the disease has not progressed too far, and if the case is properly operated on.

I have a case now that was operated on six and a half years ago, and she is still in perfect health. The cancer was as large as my fist, and the symptoms were typical. It was located in the neck of the uterus. If you can get these cases in time, before disease has spread, it may not recur, but if the cancer has involved the glandular structures of the pelvis, we do not know where it will end. I do not believe in the removal of these glands, because they are so numerous that we can not remove them all. A gland no larger than the end of a pencil is as dangerous as a gland the size of your fist.

DR. EDWIN RICKETTS, Cincinnati—I do not think it is fair to criticise a man who gives us an honest report of 482 operations for cancer of the uterus, with two of them living. With all due respect to Dr. Kolischer, who made the assertion that the technic was faulty, let us be true to ourselves, and true to our patients. Although the results in all operations for cancer of the uterus have been most unsatisfactory, we ought not to let up in any way. You may work along the line of electrolysis, total extirpation, or high amputation, but do not let up in your best efforts for a possible cure of the disease. You may theorize as much as you please, but when you come down to this simple question, I must say that I, for one, have been greatly disappointed. I question very seriously any man who says he has 10 per cent. of cures in cancer. The operation for cancer of the uterus should be classified, and I do not think it is fair that we have to produce statistics including cases we accept as inoperable, and consider them on a line with those cases that improve. Personal experience does not go very

far in the consideration of this subject. We can arrive at definite conclusions only as the result of consensus of opinion of the medical profession.

DR. H. O. MARCY, Boston—For ten years this Section has been discussing this question, and I do not doubt that for ten years to come we will find the same difference of opinion as to minor details. Of course, it is an important subject, and yet the experience of most of us has taught us something. Ten years ago the majority of operative surgeons were using the method advocated by Dr. Frederick, but most of us have eliminated this method of high amputation, and we do a more thorough operation. My own method is to remove the tissues as far as possible from the seat of the disease, open the abdomen, and remove the appendages and surrounding tissues as far as I can. I am sure I am getting better results, and I have patients living and well after more than five years. If this be the better method, why is it not the method we should use instead of returning to earlier ways? After curetting and cutting away as far as possible, I used to pack the vaginal vault with wet cotton, and then introduce the thermo-cautery, expecting that by steaming I could penetrate the tissues more deeply. The more thorough the method, the safer the result. I am certain that the general consensus of opinion is away from the conclusions of the speaker, and more toward conservative, wise, aseptic operation of the most efficient type for removal of malignant disease of the pelvis.

DR. A. J. DOWNES, Philadelphia—In my paper yesterday I made some remarks about cancer of the uterus. Every surgeon who has written about hysterectomy for cancer involving the cervix admits a recurrence of almost 99 per cent., to be correct, by the common methods of operating. If Dr. Burns' cases were examined microscopically and the results as reported are true, it appears that there is something in the use of the cautery for cancer of the cervix. It is important to know this, for it is just as safe, if one can do a practically bloodless operation, to remove the uterus after having first amputated the cervix, as it is to do a cervix amputation alone with the cautery knife. I have adopted this method in three cases, two of them advanced with the cervix fixed. In each case the cervix was first amputated by the cautery knife and the remainder of the uterus then removed by the electro-thermic angiotribe in the blades of which were included the broad ligaments. The operation is completed by making section close to the inner surface of the blades. This leaves a broad ribbon of seared hemostased tissue on each side of the pelvis, which is non-exuding, non-adhering and non-absorbing. In the last case, in which I also opened the abdomen, after thoroughly removing the uterus, one of the blades of the small forceps, which heats water in five seconds, was applied to each side, in the para-cervical region, with a view of transmitting heat through the infiltrated area, care being taken not to come in contact with the ureter. These cases do better than where the ligature is used. No blood is lost, except in making the incision into the peritoneal cavity at the cervix, or in making a too rapid sweep of the cautery knife. The point involved is that we not only go deeper into the tissue of the broad ligament, but we leave it sterile and sealed. The mortality rate should not exceed even that of amputation of the cervix.

DR. J. H. CARSTENS, Detroit—The more I see of cancer, the fewer vaginal hysterectomies I do. I have found that these bad cases on the border-line are those that give you a large mortality. The results are very poor, so that I prefer to have a less immediate mortality, and prolong the patient's life by curetting, high cervix operation, cauterization, etc., reserving the radical operation for those cases which, in my own mind, have a good chance of making a permanent cure.

DR. FREDERICK (closing the discussion on his part)—This discussion has brought out the fact that a fair proportion of men doing operations for cancer of the cervix do a radical operation for nearly every case, even when the broad ligaments and perimetric area are involved. I am talking about purely operable cases, where the disease is confined to the cervical tissues, and does not go beyond the confines of the cervix. That alone is an operable case. You have recurrence every time, if there is any involvement of even the outer limits of the cervix. You can not prevent it. There is only one class of cases in which you are justified in doing a total extirpation, and that is where the disease is confined to the cervix, so far as you can prove it. Facts are facts, and I have here the report of over twelve hundred operations, from men like Price and Kelly and MacMonagle. Dr. Kelly has had four recoveries over five years old out of many over a hundred. You all admit that these men are good diagnosticians, and that they know how to do a hysterectomy as well as anybody. They are clean operators, and will not infect the tissues around the field of operation, and yet look at their recurrences. I do not believe that there will ever be any method of total extirpation, high amputation, or any other operation, by which you will get 10 or 15 per cent. of recoveries. The technic of the operation is certainly well-known. You can not make any more room outside the cervix between it and the ureters and the pelvic vessels in woman in the future than you have now or in the past, and you can not get away from the cervix any further unless you remodel the pelves of women.

As far as return in the scar is concerned, every man with whom I have ever talked or corresponded says that the return is in the scar. Kelly and Cullen say so; in fact, everybody says so, except Dr. Kolischer, who says it does not return in the scar. Where is it? You feel it in the vaginal vault on either side. It may not be exactly in the scar, but just at one side, a line not thicker than the edge of paper. The infiltration is right up to it, and bulging out on either side.

I did not say that cancer of the cervix involves the bladder early. In cases where cancer begins in the anterior lip of the cervix, the bladder is liable to be involved early, and Dr. Kolischer substantiates this by reporting 15 cases out of 150, or 10 per cent., where the bladder was involved.

If radical operation is going to be done, I want to commend Dr. Werder's operation. No operation gives such good prospects, from a theoretical as well as practical standpoint. Gentlemen, why should you remove the body of the uterus above the cervix when it is not diseased, with the hope of getting better results, when you do not get better results with total extirpation or radical operation than I do with my high amputation, or better than men did fifteen years ago with high amputation? Why subject a woman to 10 per cent. of chances of mortality immediately after operation simply to do a radical operation? It is no trick, when you have the anterior and posterior peritoneal folds right before you, to tie off the broad ligaments on either side, and sew the edges of the vault together. The recurrence will be in the perimetric tissues, along the line of the cervix, anteriorly, posteriorly and laterally, and you can not take out any farther than up to the uterine vessels and ureters. Why, then, insist on taking out the body simply for the purpose of opening the peritoneum? There should be reason in all things, even in radicalism. I have seen men open the abdomen for a diseased tube and ovary on one side, but they took out everything on both sides as well as the uterus, because the other side might become diseased later on—that is radicalism without reason.

DR. CUSHING (closing the discussion)—Appended to my paper is a pathologic report showing that the recurrence in my case was a cancer, and not inflammatory tissue. In regard to the removal of glands in this operation, I think we must know from analogy of the operation for cancer of the breast and removal of the axillary glands that we get better results when that is done. In the last years the majority of operators have appreciated the danger of recurrence. Since the operation of tying off everything from above, closing everything from above, pulling the uterus down in bulk and cutting through the vagina from below, thus removing at once all infected tissues, there is a chance of doing the operation without infecting the tissues around, and consequently the result is better. I believe that this is the operation which will be done in the future, as, in my judgment, it gives better results.

The most common diseases in Alaska are said to be cerebrospinal meningitis, scorbutus, neuralgic form of rheumatism (inflammatory being very rare), alcoholism, insanity, digestive and nervous affections. Pneumonia is almost unknown.

Clinical Report.

THE SURGICAL TREATMENT OF ASCITES DUE TO CIRRHOSIS OF THE LIVER.

J. F. BALDWIN, M.D.
SURGEON TO GRANT HOSPITAL, ETC.
COLUMBUS, OHIO.

The number of cases in which operative procedures, as recommended by Talma and Morrison, have been resorted to, is still so small that each additional case is of interest and should be placed on record, to enable us to determine the value of the operation and its technic. I am able to report the following three cases:

CASE 1.—J. A. B., Oct. 9, 1900; aged 46; occupation, moulder; appetite, fair; bowels usually regular; urine normal; has had pain through the liver region at times for the last 3 or 4 years; had an attack of jaundice 23 years ago; is a constant and very heavy drinker of alcoholics; at times has a good deal of trouble with his stomach owing to an excess of mucus. Area of liver dulness is somewhat diminished. Has a small accumulation of ascitic fluid.

Operation.—The patient having, from his history and physical signs, beginning cirrhosis of the liver, operation was advised and was executed at Grant Hospital, October 12, Dr. W. J. Green, his physician, being present. Anesthetic, chloroform. Incision was made through the right rectus muscle. Gall-bladder found normal. Liver was found hard and with its surface typical of cirrhosis. The cecum, which was found in the left epigastrium, was without much difficulty pulled into the incision and the appendix inverted. The parietal peritoneum was scarified extensively and also the corresponding portion of the omentum. The omentum was then attached to the peritoneum by rows of catgut sutures on each side of the incision. The incision itself was closed with catgut for the peritoneum and transversalis fascia, through-and-through silkworm gut and wire coil for the external fascia. Patient made a prompt recovery and is entirely well.

CASE 2.—Mrs. L. L., Findlay, Ohio. Physician, Dr. C. E. Beardsley, Ottawa, Ohio. May 27, 1901. Aged 59. Menopause at 51. Appetite poor; bowels constipated. Patient states that she has had trouble with her liver for the last 20 years, but that this has been worse for 5 years. Has had several attacks of jaundice. Has not lost much flesh; is cachectic in appearance, but not profoundly so. The liver is tender and seems to be markedly enlarged, especially throughout the left lobe. No nodules. Has a large amount of ascites. This, she says, has only appeared within the last two weeks. Complains of more or less feverishness at times, with slight chilly sensations. Patient's habits have been excellent. From history of the case there is a strong suspicion of malignancy, but this can not be positively affirmed. Exploration through abdominal incision advised, with such subsequent procedures as may seem indicated.

Operation, May 30, 1901, at Grant Hospital. Chloroform anesthesia. Opened through the right rectus muscle. Through this opening evacuated a large quantity of fluid, the patient being turned upon her side for that purpose. Gall-bladder greatly contracted, but no gallstones present. Liver was hard and much thicker than normal. The surface was distinctly hobnailed, but the enlargement is less marked through the right lobe. The conditions present seemed to indicate cirrhosis but malignancy could not be positively excluded. The spleen was also greatly enlarged. Other abdominal organs apparently normal. After scarifying omentum and peritoneum, as in the previous case, the two were attached by continuous suture in rows of plain catgut. Incision closed with through-and-through silkworm gut.

Following the operation there was a prompt re-accumulation of the fluid which at intervals found exit between the stitches. After about 10 days this re-accumulation ceased and the patient's recovery was entirely uneventful. She returned home in the fourth week without any ascites. Her general condition, however, was not materially improved and the belief that the trouble was malignant was strengthened. She died of exhaustion about three months after her operation, but with no re-accumulation of the fluid. No autopsy.

CASE 3.—Mr. C. B., Nov. 21, 1901. Aged 33. Ex-saloonkeeper. Patient commenced drinking about 12 years ago, but did not drink very heavily until about 5 years ago, when for four years he drank from 2 to 3 quarts of whisky or gin daily. Has drank practically nothing for the last year. About eight months ago noticed some swelling of the feet and legs, and soon after that abdominal dropsy set in. Was tapped by his physician two weeks ago, a large amount of water being drawn off. The discharge continued to come through the trocar opening for about 3 days. The water is now rapidly re-accumulating, so that the abdomen is enormously distended and the patient very uncomfortable. Appetite is usually good; urine normal; lungs and heart normal. Owing to a large accumulation of ascites, can not determine the condition of the liver, but that it is greatly contracted seems beyond question.

Operation, November 23. Present, Dr. E. W. Schueller, his physician, and Drs. Baker and Hendrixson. Anesthetic, chloroform. Abdomen opened in the median line above the umbilicus. Many gallons of serum escaped through this opening. The spleen was found much enlarged but apparently normal in structure. The liver was found greatly contracted, being the smallest adult liver I have ever seen, its surface resembling that of a piece of peanut candy. The omentum was exceedingly small, but its veins were very large, as were also the abdominal veins. The surface of the liver was thoroughly scarified and also the corresponding portion of the diaphragm, together with the parietal peritoneum and the omentum. Omentum and peritoneum united by continuous sutures of catgut. Incision closed by through-and-through silkworm gut, the stitches being placed close together. Patient recovered promptly from the operation and returned to his home in the third week. The fluid re-accumulated steadily and tapping was resorted to by his physician soon after his return and had to be repeated at short intervals. He died December 21 of exhaustion. Autopsy refused.

COMMENTS.

These three cases constitute my experience with epiplopexy as a cure of ascites. In the first case the patient was in excellent condition and the disease was taken at such an early stage as to render the prognosis exceedingly favorable, and this the result has verified. In the second case the relief of the ascites was complete, but the disease itself, which was probably malignant, continued to progress to a fatal issue. In the third case no operation would have been made could the condition of the liver and omentum have been known. The omentum was scarcely larger than the hand, and thus offered little surface for anastomosis. The liver had also undergone such extensive changes that its normal functions were probably almost entirely lost.

So far as the operation itself was concerned, the mortality was nil. As regards the cure of the ascites, the operation was successful in 2 of the 3 cases. As regards the ultimate cure, success was attained in only one case.

State Vaccine Lymph.—The Massachusetts Board of Health reported last week to the legislature on its investigation of the feasibility of manufacturing pure vaccine lymph. The board recommends extending to the manufacture and free distribution of free vaccine lymph the system which has been in vogue in regard to diphtheria antitoxin since 1895. It recommends the construction of a building for the housing of animals. Future demands, it thinks, should be based, not upon population, but upon the birthrate. If the vaccination is thoroughly carried out by local sanitary officials, it is estimated that 150,000 persons will be vaccinated annually, of whom 60,000 will be infants, 50,000 revaccinations and 40,000 immigrants. It is estimated that the necessary buildings will cost $20,500 and the annual expenditure for salaries, etc., will be $6500.—*Boston Med. and Surg. Jour.*

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OUR BROTHERS OUTSIDE.

The distinguishing feature of the new plan of organization, permeating its every section, is the manifest purpose—through county societies existing or to be created and built up in every subdivision of every state in the Union—to attempt to reach and influence for his elevation and improvement, scientific, social and material, every individual in this country who has legal authority to practice medicine. The importance and magnitude of this work become apparent when it is known that there are, as nearly as can be determined, over 80,000 regularly licensed physicians in this country who have never been members of any kind of an organization, county, district, state or National.

It is difficult for those who have always had the advantages of society membership and influence, with THE JOURNAL and other high-class periodicals laid on their desks each week, and frequent meetings with men of equal or higher caliber, as incentives to study and mental growth, to realize the unfortunate state of these non-members, now comprising over two-thirds of the profession of the United States. With the best advantages, some of us have been enforced to make a constant up-hill fight to keep abreast of the times, to live within ethical lines and in peace and charity with our professional members. A dispassionate review of our own past will probably assist each of us in arriving at a just conclusion as to what must be the condition of these outsiders, and it may suggest the most practical methods for reaching and bringing them in.

In order to fully appreciate the importance of such efforts, as well as to make our duty more pleasant, members should constantly bear in mind the fact that almost the whole of these 80,000 outsiders are, individually, entirely reputable physicians, graduates from recognized medical schools, who have drifted into their unfortunate non-affiliated condition from indifference upon their own part, or that of the local society within whose jurisdiction they live, or because no such society existed, rather than from deliberate choice. Thousands of them are young men, only a few years out of college, and yet in a plastic state professionally, and experience has shown that nearly all of them will promptly accept an invitation from any recognized authority to meet with the other physicians of the county for the purpose of effecting and maintaining an organization. That it has been nobody's business to do this exacting, expensive and time-consuming work in the past well accounts for the present unorganized state of the profession.

Whether we will or not, it may as well be recognized, too, that, almost as much as of the members within our organizations, each of these outsiders is a factor for which the profession is held responsible, and that in a very broad sense the standing of the entire profession is involved in his success or failure. That the public has good reasons for this is readily understood when it is remembered that he was graduated from a school whose teachers were leaders in the ranks of our state and National organizations; he was authorized to practice under laws of our procurement; he is met in consultation by members of established reputation, and in every other respect, so far as the public is concerned, or can see, he is a full-fledged member of the profession. As has already been said, probably a majority of those referred to are young physicians whose lives are largely to be shaped or misshaped by their professional environments. As members of live local organizations, with frequent meetings, and the broadening professional and social ambitions incident thereto, the possibilities open to such men, and through them to the profession, and the communities in which they live, are beyond calculation. To cast them off, or to leave them alone, which means practically the same thing so far as they are concerned, is to continue the old order of things, with the best energies of the large majority of these really excellent men expended in local or personal dissensions or strife, dwarfing and discreditable alike to the individual and the profession as a whole.

Systematic organization has brought about a different order of things in a few states, and in a few counties in all of the states. It has been demonstrated by them we think beyond question that nearly all of our professional ills have their origin in the segregated life incident to the calling, and that the only effectual remedy for them lies in the mental and social elevation, and the good fellowship, made possible only through good local societies. The new system furnishes the occasion and the machinery for organizing such societies in every county in every state. The plan will only prove Utopian in those counties where the American Medical Association has no member, or where such member falls short of his duty.

THE DOG-DAYS AND HYDROPHOBIA.

To the very hot weather that comes so often at the end of July and the beginning of August, the traditional name of "dog-days" has been given, almost from time immemorial. In recent years the name has given rise, in the popular mind at least, to the idea that dogs are much more liable to go mad during these months than at any other season of the year. The term dog-days, however, is only our English equivalent for the Latin phrase, the days of the dog star, when Sirius, called by the Romans also Canis, the dog, is in the ascendant—the heliacal rising of this star occurring between July 20 and August 15.

Words are usually supposed merely to convey ideas; as a matter of fact they sometimes dictate a new sense

that is totally unjustified by their etymology, but that often usurps the place of the original signification intended. Dog-days is one of the most striking examples of this tyranny of words as it is called with regard to which the student of philology knows, that he must be ever on his guard because of its liability to mislead the incautious into unwarranted assumptions of word-meanings. This season of the year has had a bad name for special unhealthiness ever since the time of Hippocrates, but the dog-days were not in olden times supposed to be any more unhealthy for animals than for man and any possible special effect on dogs was not even thought of.

It is perhaps a good thing that there should be one season of the year, at least, during which the public takes to heart somewhat seriously the idea that hydrophobia is an ever-present danger in modern life, because of the number of dogs that are allowed to run at large through the streets of our cities. There is very little excuse for the presence of dogs in cities at all; except as a means of encouraging daily exercise in "the childless old," they have no good reason for being. Very few are watchdogs in even the most liberal signification of that term. Most of them are spoiled pets, living unnatural, unhealthy indoor lives, waxing overfat, affording children and their elders opportunities for and training in the practice of tyranny. Meantime, every year, because of the unwarranted freedom allowed them, there is a distinct and by no means trivial human mortality from hydrophobia and an immense amount of worry and anxiety over dog bites.

As the result of the popular notion with regard to the greater risk of hydrophobia during the dog-days, the family physician finds many false impressions to correct at this time. Even the slightest scratch from the tooth of a dog, or the tingling of a cut on the hand after a dog has licked it, is apt to be exaggerated by the neurotic into a dangerous inoculation that may to their excited minds have a fatal ending. Such people may actually worry themselves sick for the time being, if they are away from the influence of a physician in whom they have confidence. While an inoculation with canine saliva may, as is true of any saliva, even human, prove a ready source of purulent infection, needless to say there is never the slightest danger of rabies, unless the animal inflicting the wound actually has the disease. It is not a dog bite in itself but the bite of a dog suffering from rabies that is dangerous. One of the special dangers in these cases is the ill-advised use of strong antiseptics, with the idea of prophylaxis. It is after slight dog bites on the fingers that the use of bandages dipped in carbolic acid have caused gangrene, and any physician who suggests even a 3 to 5 per cent. carbolic solution as a wash in such cases, must be careful to warn mothers and nurses of the danger of a wet dressing.

Another cause of anxiety during the dog-days when thoughts of hydrophobia are uppermost, is the possibility of an old bite causing rabies. The newspapers take advantage of the interest in the subject to give stories of persons bitten five, or ten, or even twenty years before, dying from hydrophobia. Such cases are either fabrications or errors of diagnosis. The infection of true rabies may perhaps lie dormant in the tissues for several months, though we believe there is not much evidence of the genuine disease having developed more than six months after the bite of a rabid animal. There are certain cases of pericarditis, however, in which the presence of the effusion within the pericardium gives rise to an irritation of the recurrent laryngeal nerve at its origin from the vagus. Some of its fibers are distributed to the muscles of deglutition and its irritation, therefore, causes a spasm of the constrictor muscles of the pharynx; even the thought of swallowing may bring this on, and the condition exactly resembles the set of symptoms that develop in true hydrophobia. The muscular spasm extending to the laryngeal muscles also may even give rise to the harsh sounds in the throat that in true rabies are popularly supposed to be barking, and this completes the illusion as to hydrophobia. If the pericarditis fails to be recognized, and it is a disease that is confessedly often missed, a history of a dog bite will readily give rise to the thought of long-delayed rabies. The pericarditis in these cases, however, has no connection with the dog bite. Nervous individuals may be assured a few months after a bite has occurred that all danger of the development of rabies is over.

Meantime the recurring wave of popular interest in hydrophobia because of the dog-days should be taken advantage of by physicians to create and extend a public opinion against our present loose habits with regard to the freedom allowed dogs. They are dangerous from many other points of view, besides that of rabies. They are the hosts of certain animal parasites of human beings. Their uncleanly habits in nosing over excrementitious material in the street, make them eminently undesirable playmates for children, who permit them familiarities that may prove a source of disease. It is generally conceded now that they may be conveyors of certain of the ordinary infectious diseases. By the proper spread of knowledge in these matters, the popular philologic misconception of the dog-days may thus be made a source of good to the community that will help on the great cause of disease prevention better than any mere attention to hydrophobia could accomplish.

RECENT OBSERVATIONS ON EMPHYSEMATOUS GANGRENE.

The subject of infections with gas-producing organisms has commenced to attract general attention, not only in this country, but also in Germany and elsewhere. Thus Albrecht[1] in Gussenbauer's clinic and Stolz[2] publish extensive studies of the literature and give the results of personal investigations. The essential outcome of their work is to confirm the observations already made by Fränkel, and especially by Welch and others in this

1. Arch. f. Kl. Chirurgie, 1902, lxvii, 514-586.
2. Beiträge zur Kl. Chirurgie, 1902, xxxiii, 72-136.

country, as to the importance in these processes of the *Bacillus aerogenes capsulatus*. In Albrecht's series of cases, many of which occurred after aseptic operations made under, if not ideal, at least highly satisfactory conditions, it was found very likely that infection of fresh wounds may result from atmospheric dust, because on inquiring into the conditions that surrounded the operations followed by these unexpected infections, it was found that repairers had been at work on the roof of the amphitheater and that their hammering had given rise to a great deal of disturbance of the dust particles in the room. These cases also offered an exceptional opportunity to study the results of pure infections with gas-producing bacilli. They showed rather mild symptoms, essentially of intoxication, the patients feeling tired, appearing somewhat pale and complaining of a burning pain in the wounds; some fever was also usually present. The bacilli were contained in a serohemorrhagic fluid, and when this was evacuated rapid healing followed. Mixed infection with anaërobic bacilli and pus cocci, however, lead to a more typical picture of gaseous or emphysematous gangrene. Here also free evacuation may be followed by healing. In two of Albrecht's cases he found an organism which corresponded more closely with a butyric acid bacillus described by Schattenfroh and Grasberger, which has the power of causing putrefaction in proteids, the other cases appeared to be caused by the typical gas bacillus.

A. Stolz, after a thorough review of the literature and a study of some cases of his own, also reaches the conclusion that the Fränkel-Welch gas bacillus plays the principal rôle in the etiology of gaseous infections. Stolz describes one case and Von Wicklein three cases in which a closely related species, namely, an anaërobic mobile butyric acid bacillus, was isolated as the cause. Of the aërobic bacilli that may cause gas infections, Stolz mentions the proteus, coli and para-coli bacilli. In this connection should be mentioned also the *Bacillus mucosus capsulatus* which Howard of Cleveland has shown may be the cause of inflammatory processes associated with the production of gas. In order that the question of the etiology and nature of many of the processes referred to may be understood more thoroughly, it is still necessary that the number of cases carefully studied by perfect technical methods be increased.

Both Albrecht and Stolz discuss the relations of so-called malignant edema and its bacillus to the more recently observed cases of gas bacillus infection, and both reach the conclusion that the name bacillus of malignant edema is in reality a collective name for a series of aërobic and anaërobic bacteria, any of which may cause a disease in guinea-pigs similar to the one produced by Koch by the injection of a small quantity of putrid fluid into guinea-pigs and designated by him as malignant edema. But in man there is no condition sufficiently well characterized either clinically or etiologically to merit the name of malignant edema, and what has previously been called malignant edema in man in most cases has been really infection with gas-producing bacilli, especially *Bacillus aerogenes capsulatus*. There seem to be other bacilli also that may cause such infections, but all appear to belong to the same group. Schattenfroh and Grasberger have called the gas bacillus the butyric acid bacillus, and they have divided the butyric acid bacilli into two or three kinds, the mobile, the immobile, and later, the putrefying, but Fränkel and others are not disposed to accept this conclusion. These are questions that have to be settled by continued examination and report of carefully observed cases.

GERM PLASM AND CANCER.

Cancer theories are the order of the day, the question of the origin of these growths is one that tempts original thinkers as well as those who follow out the well-marked paths of thought in this particular department. One of the latest, based on biologic studies, is by R. Beard,[1] University Lecturer on Comparative Embryology, Edinburgh. The immediate cause of this publication of his views was a comparison he had been led to make in another article between the modes of growth of certain organisms and the pernicious activity of cells in certain pathologic conditions of the human chorion. If the latter be really carcinomatous, as is held by certain pathologists, the cause of cancer, he says, "is clear as the light of day."

That we have thus far missed this explanation is due, he says, to our faulty notions as to the life cycle of the vertebrate organism. Instead of this being simply egg, embryo, adult, it is, according to his researches, more complex, including, 1, the gametes, egg and sperm; 2, a phorozoön, larval or asexual stage; 3, the primary germ cells destined for future generations, and 4, and only to fill out the cycle, the embryo or sexual generation. The normal destiny of every germ cell is to give birth to an embryo, but they are often misplaced and this gives rise to the embryomas of Wilms (teratomas, dermoid cysts) and a direct connection between these and cancer growths has been noted by Wilms. These misplaced or vagrant germ cells are customarily found, at least in some of the lower orders of life; in sharks no embryo under a certain age has been observed by Beard where they did not occur. Most of them doubtless degenerate, others form embryomas, but their favorite localities are where these formations seldom or never occur, as the stomach (pylorus), skin, rectum; and these are exactly the cancer predilection points. He summarizes the argument as follows: "Granted the facts of the origin, migrations, and the history of the germ-cells of vertebrates, and assuming the course of the life-cycle to be that previously indicated, by hypothesis cancer is derived from vagrant primary germ-cells, which, instead of forming a more or less complete embryo or embryoma, skip this and give rise to a larva or phorozoön of indefinite unrestricted powers of growth. This is, of course,

1. London Lancet, June 21.

purely hypothetical, but it becomes the true explanation by the following facts. On the one hand, as my researches have shown, the hypothetical 'verirrte Keime,' or 'lost germ' of pathologists not only exist but they are numerously represented and by things capable of abnormal development, the vagrant primary germ-cells. On the other hand, the carcinomatous nature of such an abnormal growth of a larva or phorozoön has been abundantly demonstrated by Marchand for the instances of the pernicious growths of the chorion, chorion-epithelioma. If such a chorion, the representative more or less complete of the asexual generation, when robbed of its embryo or wnen it fails to form such, can—and this is established—give origin to a malignant carcinomatous tumor, the nature of cancer is clear. The vagrant primary germ-cell is the seed, while its fruit, sometimes represented by an embryoma, may on occasion take the form of a carcinoma."

While the suggestion here is not new, being the same as that followed out by Adami, Beard has widened the scope of his generalizations to a much greater extent. It is possible he would be more scientific were he less positive, but he has furnished a suggestive article and this coincidence of his views with Adami's, so far as it exists, strengthens his position. His paper is also valuable in showing the sidelights thrown on medical subjects by general biologic research.

THE LIGHT CURE IN LEPROSY.

The Hawaiian Board of Health proposes, it is said, to experiment with the *x*-rays and the light cure in leprosy. The good effects in the treatment of the superficial lesions of tuberculosis and the malignant skin diseases are certainly suggestive of possible benefit from this agency. Leprosy as a bacterial disease has some special peculiarities that would indicate a possible utility of the method; it is mainly confined in its manifestations to the parts of the body that can be reached and its microbe, judging from its apparent feeble contagiousness, is not in all respects resistant to hostile influences. It has indeed been reported to be effective to a certain extent. Sequeira has observed some action on the lesions of tubercular leprosy, but the experience in this particular direction seems to be thus far limited. The facilities for *x*-ray therapeutics and opportunities for any extensive clinical experiments with leprosy have apparently not yet existed together to any great extent, but in Hawaii there would appear to be chances for a valuable test. If the new treatment has any value in this most formidable disorder its discovery will be a boon to an afflicted class of sufferers that deserve our fullest sympathy. The medical world will wait with interest for any results of a thoroughly conducted investigation of the subject by the Hawaiian sanitary authorities.

VENOUS THROMBOSIS AS A COMPLICATION OF PNEUMONIA.

Venous thrombosis is well known as a complication or sequel of typhoid fever, and it is occasionally observed likewise in connection with other diseases. In some instances it has been supposed to be due to phlebitis, and this in turn has been made dependent on the primary infection; while in other instances the obstruction of the vein has been attributed to the sluggishness of circulation consequent on the state of debility attending or following the original disease. Although pneumonia especially is characterized by a notable increase in the coagulability of the blood and the presence of pneumococci in the circulation in connection with that disease is not uncommon,[1] the number of cases in which venous thrombosis in the course of pneumonia has been recorded is by no means large. As a result of a careful search of the literature Dr. Walter R. Steiner[2] has been able to collect 38 such cases, and he reports in addition three cases presenting this complication among 500 patients with pneumonia under observation at the Johns Hopkins Hospital. In the overwhelming majority of the cases under consideration the thrombosis appeared during convalescence, in one on the day of the crisis and in four during the course of the disease. In all instances one or both lower extremities were involved, the left alone in 16 cases, the right alone in 10 cases and both together in 7. Death occurred in 9 cases and recovery in 25 of the cases, and in 5 of the former the fatal result was due to pulmonary embolism.

CREMATION GROWING IN FAVOR.

Sir Henry Thompson[3] has compiled the statistics of cremation, as he has been able to obtain them, largely from the reports and speeches of M. Saloman and Bourneville at the annual meeting of the Paris Society for the Propagation of Incineration. It appears from these that this method of disposal of the dead is increasing in favor throughout the civilized world. New crematories are being constantly added to those already existing and the method has been introduced into ultra-Catholic countries like Spain where the influence of the church has been against it, and in Russia, where similar conditions exist, the government proposes to make it legal. In this country the largest number of cremations occur in San Francisco, under the auspices of the Odd Fellows' fraternity, in whose establishment between six and seven hundred bodies were burned in 1901, or nearly as many as those in all Germany and more than those in England during the same period. Thompson gives detailed statistics from the 26 crematories in the United States and from twelve of the 22 in Italy from which he has obtained the total number of cremations and those during the year 1901. Hygienic reasons are the chief factors in the growing extension of the procedure and recently a petition signed by over 3000 medical men has been presented to the Imperial Reichstag of Germany asking that it be made compulsory in cases of infectious disease. The objections to it are sentimental and religious but seem to be rapidly being overcome and their real force is not very apparent in either respect. Esthetically, cremation is, when one considers all the circumstances, the preferable method.

1. Dr. Rufus T. Cole (Bulletin of the Johns Hopkins Hospital, June, 1902, p. 136) found pneumococci in the blood in 9 cases among 30 in which cultures were made and all of these proved fatal. These results agree with those obtained by a number but not by all observers.

2. Bulletin of the Johns Hopkins Hospital, June, 1902, p. 130.

3. London Lancet, July 5.

The only really valid objection to it is that it might embarrass justice in some medicolegal cases, and this must be weighed against the very obvious hygienic advantages. It would seem that, with a proper death registration and enforcement of the existing laws, the cases where cremation could interfere with justice ought to be few and far between. Undoubtedly earth burial will long continue to be the prevalent custom, but in cities and wherever the facilities exist, cremation is sure to increase in favor. In a medical point of view it has much that can be said for it, and the increase of urban population, if the present tendencies continue, will almost make it a necessity in some places in the not far distant future.

Medical News.

CALIFORNIA.

Dr. Eshleman's Will Probated.—The will of Dr. Isaac S. Eshleman, Fresno, was probated July 7. The estate is valued at $9100.

Dr. Stehman Ill.—We regret to learn of the serious illness of Dr. Henry B. Stehman, who was until a short time ago superintendent of the Presbyterian Hospital, Chicago. Before he left for California he had an empyema with a discharging sinus. About three weeks ago the discharge ceased and he had retention of pus with high temperature, necessitating a resection of three ribs. The operation was performed by Dr. Henry H. Sherk of Pasadena. The following night Dr. Stehman had four severe hemorrhages, but rallied and at last reports was somewhat improved.

Personal.—Dr. P. F. Brownridge, San Jose, fell from the second story of the building in which his office is located, to the ground, twenty feet below, alighting on his back on a cement sidewalk. Aside from the shock and a sprained back he was uninjured.——Dr. and Mrs. George F. Shiels, San Francisco, have sailed for Europe. They will return in the early fall.——Dr. Wallace E. Parkman, U. S. Army, has returned to San Francisco, from Manila.——Dr. Oliver D. Hamlin has been re-elected president of the Oakland Board of Health.——Dr. Fred C. Gerlach has been appointed to a position on the San Jose Board of Health.

COLORADO.

Colorado's Deaths.—For June the deaths in the state numbered 778, an annual death rate per 1000 of 16.17. Diphtheria caused 18 deaths, scarlet fever 14, and typhoid fever 20.

Dr. Hosford Acquitted.—Dr. Sara D. Hosford, Denver, has been acquitted on the charge of causing the death of Martha Chapman by a criminal operation. The state did not make out its case as the evidence was circumstantial only and was indirect.

Dr. Tyler's Successor.—Dr. Claude E. Cooper, Denver, has been appointed a member of the State Board of Health, vice Dr. George E. Tyler, deceased. The governor will recommend him for the position of secretary and the board will undoubtedly follow the recommendation.

Consolidated Colleges.—The Denver and Gross College of Medicine, Denver, formed by the consolidation of the Denver College of Medicine and Gross Medical College, elected the following officers at its meeting held July 9: Dean, Dr. Sherman G. Bonney; vice-dean, Dr. Leonard Freeman, and secretary, Dr. Robert Levy.

GEORGIA.

Sanitarium Burned.—A fire of unknown origin occurred June 22 in the Starnes Sanitarium, Atlanta, damaging the building to the extent of about $3000. No casualties occurred.

Surgical Ward Opened.—The new surgical wing of the St. Joseph Infirmary, Atlanta, was formally dedicated July 16. The new wing contains operating and sterilizing rooms and eighteen rooms for patients.

Plant Line Hospital Department to Stay.—Information has been received at Savannah that the operation of the old Plant system relief and hospital department will be continued by the Coast Line, for the present, just as it was conducted by the Plant system before its absorption by the other company.

Personal.—Dr. Hayward S. Hansell, Atlanta, has passed his examination for the Medical Department of the Army.——Dr. William B. Orear, acting assistant surgeon, U. S. Army, has been made assistant surgeon of Volunteers, with the rank of captain.——Dr. George W. Lane, Atlanta, has gone to Vienna for several months' study.——Dr. Eugene B. Elder, Indian Spring, has been appointed resident surgeon to Macon City Hospital, vice Dr. James N. Carter, resigned.——Dr. George H. Ehrhorn, Augusta, started for New York July 8, en route for South America.

ILLINOIS.

Dr. Hill Retires.—Dr. William Hill, Bloomington, one of the oldest practitioners in the city, has retired from active professional life.

Personal.—Dr. Maude E. Nichols, Champaign, will start for Palestine early in September under the auspices of the Presbyterian Mission Board.——Dr. Richard S. Slevin has returned to Peoria after two years of study in Brussels, Belgium.——Dr. Clinton E. Powell, Alvin, has been appointed assistant surgeon at the Soldiers' Home, Danville, vice Dr. Ashley C. Follette, transferred.——Dr. Charles S. Young, Geneseo, has been commissioned first lieutenant and assistant surgeon, I. N. G., and assigned to the Sixth Infantry.——Dr. and Mrs. William Niergarth, Pekin, have sailed for Germany.——Dr. Alexis T. Telford, assistant superintendent Illinois Asylum for Insane Criminals, Chester, has resigned.——Dr. Fredericka C. Zeller, Peoria, has returned from a round-the-world trip of three years.

Chicago.

Tetanus at the County Hospital.—It is reported that of the 30 cases of tetanus treated at the County Hospital during the last five years, all but two have proved fatal.

Pure Milk for Poor Babies.—Mothers living near the Northwestern University Settlement, the Chicago Commons, the Gad's Hill Social Settlement, Hull House, or the Bureau of Charities can obtain sterilized milk of the best quality at the usual milkman's price during the summer months. To those unable to buy good milk, it is furnished without charge for ailing infants.

Personal.—Health Commissioner Dr. Arthur R. Reynolds has been appointed a delegate to the Third International Sanitary Conference, to be held in Washington, D. C., October 15.——Dr. Louis M. Gregory was thrown from his buggy, July 18, and sustained a dislocation of the shoulder and a fracture of the right arm.——Dr. E. J. Gardiner has been elected professor of ophthalmology in the Chicago Eye, Ear, Nose and Throat College.

Few Respond.—Less than a baker's dozen of physicians have responded to the Health Commissioner's appeal for midsummer work in the so-called "tenement-house" districts. The need for such work threatens to be more urgent this year than for many years previous. The unusual weather conditions are playing havoc with infant and child-life. A hundred deaths from acute intestinal diseases alone—73 per cent. of which were among those under one year of age—were reported last week, as compared with only 59 during the previous week, and the total deaths under 5 years of age form nearly 38 per cent. of the total mortality.

Deaths of the Week.—For the week ended July 19 there were 519 deaths, an annual death rate per 1000 of 14.86. This compares unfavorably with the rate of the corresponding week of 1901, which was 12.66. In addition to the increased number of deaths from the usual summer maladies there is an increased prevalence and mortality in the acute contagious diseases of childhood—diphtheria, measles, scarlet fever and whooping cough—due probably to the absence of sunlight as well as to the generally depressing effects of the weather on the tone of the system. There is a shocking want of care in many localities against exposing the young to these contagions.

KENTUCKY.

Surprise for Dr. Elliott.—On the fiftieth anniversary of his entry into the practice of medicine, Dr. Charles A. Elliott, Paducah, was called for consultation into the office of Dr. James T. Reddick, where was assembled the Paducah Medical and Surgical Society, which, after eulogistic speeches, presented Dr. Elliott with a handsome gold-headed cane, suitably inscribed.

Kentucky School of Medicine.—The fifty-third annual commencement exercises of this institution were held in Louis-

ville, June 10. The course of this college now conforms strictly to the requirement of the state boards of 26 teaching weeks. Captain John. H. Leathers, president of the Board of Regents, conferred degrees on a class of 44, and Dr. William H. Wathen, dean of the faculty, announced the honors. Post-graduate degrees were conferred on 16.

Kentucky University Commencement.—The annual commencement exercises of the Kentucky University School of Medicine, July 3, including addresses by President Burris A. Jenkins of the university, on "The Responsibility of the Physician and the Need of Endowment for Kentucky's Medical Colleges; the valedictory, the awarding of honors, and the conferring of degrees on a class of 18, occupied just 45 minutes, after which the annual banquet was held at the Pendennis Club.

MARYLAND.

Gasoline Habit.—A case of "gasoline habit" is reported in a boy at Hagerstown. He enjoys inhaling the fumes of the gas, which produce pleasant dreams and curious visions. Professor R. Dorsey Coole, of the University of Maryland, says the effects are very similar to those of intoxication from alcohol, but that they are very transient, fresh air quickly bringing the patient back to consciousness. At first there is exhilaration, then giddiness, drowsiness and finally stupor follow. The effects also seem to resemble, at least at first, those of nitrous oxid gas. It is said that workers in gasoline establishments become accustomed to it, and can inhale large quantities with impunity. Of course, the danger of fatal narcosis is very great, as in any other poisonous vapor or gas. The above case is the only one known of the "gasoline habit."

Baltimore.

Tuberculosis Commission.—The Governor of Maryland has appointed a new tuberculosis commission, consisting of Dr. W. S. Thayer and Messrs. John M. Glenn and George Steward Brown.

Personal.—About the end of July Dr. Howard A. Kelly and a party of medical men and ladies will go to Dr. Kelly's hunting camp near Abmic Lake, Ontario, north of Toronto, for several weeks' stay. Dr. Kelly recently attempted to descend the rapids of the Susquehanna River and met with some thrilling adventures, being upset several times and having to swim to a rock for safety.——Dr. George M. Richardson, professor of organic chemistry at Leland Stanford University, is critically ill at the Union Protestant Infirmary from blood poisoning.——Dr. B. B. Lanier is at the White Sulphur Springs, W. Va.——Dr. C. Urban Smith is at Atlantic City for July.——Dr. John C. Hemmeter entertained his friends at his beautiful country home "Tusculum," in the Windsor Hills, near Baltimore, July 14.——Dr. Thomas P. McCormick is spending his vacation at Cape May.——Dr. H. S. Jarrett is yachting off the coast of New Jersey.——Dr. E. S. Taylor has gone to Lake Placid, Adirondacks, to spend the summer.——Drs. George Revling and William T. Howard are at Narragansett Pier, R. I.——Dr. Edward C. Moriarty has gone for a holiday to Lancaster County, Virginia.——Dr. George J. Preston sailed for Europe, July 16.

NEW YORK.

Batavia Hosp'tal Opens.—Batavia Hospital, erected with funds raised by the women of that village, opened its doors to patients, July 16. The building as it stands cost about $16,000.

New Sanitarium at Corning.—Drs. Thomas A. McNamara, John L. Miller, Willis S. Cobb and Herbert B. Smith, Corning, have leased Highland Pines Sanitarium near Corning and will reopen it on August 1 as a sanitarium and private hospital.

The McKinley Bills.—Secretary Courtelyou has been entrusted with the payment of the $45,000 appropriated by Congress for the surgeons and physicians who attended the late President McKinley. The payment will either be made at Buffalo or Canton.

Personal.—Loomis Sanitarium, Liberty, has secured the services of Dr. Herbert M. King, Grand Rapids, Mich., as physician in charge.——Drs. Minnie Kohlman and Lillian Craig Randall, Buffalo, go next month to Connecticut, where they will spend several months.——Dr. L. Emmett Holt, who graduated from the Syracuse University in 1875, has lately received from that college the degree of LL.D.

Buffalo.

June Deaths.—The death rate for June per 1000 was 11.80 per 1000 per annum. There were 364 deaths, as compared to 375 for June, 1901.

An Impostor.—A "Dr." Leonard de Bouwis, who claimed to be a Roumania physician and an agent of the Rothschild-Hirsch syndicate for the colonization of Roumanian Jews in this country, has been proven to be a common swindler. He has been arrested for obtaining money under false pretenses.

Automobile Doctors.—Several Buffalo physicians who were arrested by the police for speeding their automobiles were discharged by Judge Murphy. In regard to physicians answering sick calls he said: "I believe some judgment should be used in such cases. A moment may decide between life and death, and if the alleged offenders were permitted to go on their errands and afterward report to the police station, justice would be satiated."

New York City.

Appropriations for Repair of Hospitals.—The Health Department has been allowed $75,000 for repairs to the hospitals at Kingston Avenue, Brooklyn, at Riverside, and North Brother Island.

Half a Million in Charity.—The will of Mrs. Mary J. Walker, who died, July 2, at Millbrook, disposes of a trust fund of $500,000 left by her father, John Watson, in the income from which she had a life interest, various charitable institutions of New York City being the beneficiaries.

Fumes from Storage Batteries.—So many are the complaints from the public regarding the choking acid fumes arising from the storage batteries used in operating the street cars on one line that the health department has notified the officials of the road to abate the nuisance at once or the cars will be stopped.

Street Cleaning.—Dr. J. McG. Woodbury, commissioner of street cleaning, is experimenting systematically with various methods of cleaning the streets, and is endeavoring to give due consideration to the sanitary side by exposing in certain places gelatin plates to the air, and then subjecting them to bacteriologic examination.

Mineral Waters to be Analyzed.—The Health Department has amended Section 202 of the Sanitary Code by providing that all manufacturers of mineral waters in the city must file with the Board of Health analyses of their waters, with the place of manufacture and the source of the water. This affects over 460 manufacturers, all of whom will be required within a fortnight to obtain a permit if they wish to continue in this business. There is reason to believe that the department had good cause to take such a step.

Hospitals and Sanatoria.—The State Board of Charities has approved the certificate of incorporation of Saint Joseph's Hospital for Consumptives in Bronx borough, New York City. The board has also received a request for its approval of the incorporation of "Our Lady of Victory Sanitarium" with its principal office at Kingston. The object is to establish a sanitarium for sick and convalescent patients and a training school for the education and training of nurses and domestic servants under care of sisters of the order of St. Benedict.

Insane Hospital Crowded.—The overcrowded condition of the Long Island State Hospital necessitated the transfer of 1400 insane patients, July 16, to the Manhattan State Hospital, at Central Islip. The patients, in charge of a corps of doctors and nurses, were taken from the institution to the Kings Park station, and then placed in special cars, which went to the Central Islip institution via Hicksville. The greater number of the transferred patients will be assigned to the new colony buildings in the Manhattan State Hospital.

Good Effect of Hospital Fire Drill.—The effectiveness of the fire drill in the J. Hood Wright Hospital was put to a practical test the other day when the tenement house in the rear took fire. For a time the hospital building was in danger, some of the window frames being scorched and the glass broken, but the superintendent promptly rang the fire drill gong, and without confusion, and even without some of the patients fully realizing that there was any danger, the patients were transferred to the lower floor and to comparative safety.

The Quarter's Deaths.—The report of the registrar of vital statistics of the Board of Health shows there were 17,173 deaths in the five boroughs, in the second quarter of this year. In the corresponding period last year there were 16,615 deaths, showing an increase this year of 558. This increase is among children under the age of five years, and due to measles, whooping cough, and diarrhea. There is a large decrease in deaths due to consumption and tuberculosis, the same being also true in the same class of cases in the first quarter of this year. The report also shows a decrease in deaths from diphtheria and cancer.

A Vaccinator Charged with Assault.—Dr. Edward R. Bedford, of the Brooklyn Board of Health, has been held on a technical charge of assault because, in connection with his work of vaccinating in the schools, he vaccinated the daughter of Willis J. Walsh. Her father was opposed to her being vaccinated by the health board vaccinators, and endeavored to obtain a certificate from the family physician, but the certificate had not arrived at the time that Dr. Bedford visited the school. The case is of no little interest to the public, because while no good citizen should oppose vaccination, there is excellent reason for parents preferring to have their children carefully vaccinated by the family physician rather than by the health board vaccinators. This holds good, even though these vaccinators are most excellent and careful physicians, because experience has furnished abundant evidence of the harm resulting from the wholesale methods of vaccination which are necessarily employed in the public vaccination service.

OHIO.

Hospital Staff Re-elected.—The trustees of the Protestant Hospital, Columbus, met, July 8, and re-elected the entire medical staff for the coming year.

New Dean of Medical College.—Dr. N. Stone Scott, Cleveland, has been elected dean of the Cleveland College of Physicians and Surgeons, the medical department of the Ohio Wesleyan University. The entire corps of instructors was re-elected.

Ohlmacher Back at Gallipolis.—Dr. Albert P. Ohlmacher was unanimously elected superintendent of the Ohio Hospital for Epileptics, Gallipolis, vice Dr. William K. Coleman, resigned. Dr. Richard F. O'Connel, Gallipolis, first assistant physician, was elected assistant superintendent.

Personal.—Dr. J. McKendree Smith has been appointed superintendent of the health department of Columbus.——Dr. Henry A. Root, Toledo, sailed for Europe, July 1, on the *Kronprinz Wilhelm*.——Dr. Moritz Loewenthal, Cleveland, has gone to Europe to take a special course of study.——Dr. George A. Hollister, Toledo, has returned from England, and resumed practice.

Cornerstone Laid.—The first stone in the foundation of the new addition to St. Alexis' Hospital, Cleveland, was laid, July 16, with appropriate ceremonies. This addition, four stories in height, to be built at a cost of $60,000, will complete the hospital building as originally planned. The building has been erected part by part as the finances of the institution warranted.

PENNSYLVANIA.

Physician Injured.—Dr. E. B. Marshall, Annville, was seriously injured, July 10, in a runaway accident near his home.

Militia Changes.—Major George M. Neff, Masontown, surgeon Tenth Infantry, N. G. Pa., has resigned; Captain John W. Coffin, Beaver Falls, succeeds him, and to succeed Captain Coffin, Dr. Edwin H. Lowe, Mount Pleasant, now a hospital steward, has been recommended.

Personal.—Dr. Fremont W. Frankhauser has resigned from the staff of the Reading Hospital and has been succeeded by Dr. S. Banks Taylor.——Dr. Alonzo D. Husted has been elected to the board of the South Side Hospital, Pittsburg, vice Dr. V. D. Thomas, deceased. Dr. Matthew F. Creaven was also elected a member of the staff, vice Dr. Husted, promoted.

Memorial to Thomas A. Scott.—The daughter of the late Thomas A. Scott has given $1000 to the Columbia Hospital, to be used for equipping the operation room of the new building as a memorial to her father, the late Thomas A. Scott, who was for many years president of the Pennsylvania Railroad Company, and who was once a clerk in the office of the railroad in Columbia.

For Violation of Ordinance.—Burgess Austin Clark, July 11, adjudged Dr. Charles J. Jessop, Kittanning, guilty of violating the health board ordinances relating to contagious diseases and fined him $5 and costs in each case. The defendant took an appeal. He had attended a patient afflicted with smallpox without notifying the board of health, and, it is alleged, had moved the patient over the streets of the borough in a buggy after the eruptions were visible.

Philadelphia.

The Browning Bill.—Dr. Walter C. Browning, Philadelphia, physician to the late State Senator Chris. L. Magee, has been awarded, by the Orphans' Court of Allegheny County, $29,239.25. Dr. Browning's claim was $340,000, $190,000 for professional services, and $150,000 for investments which deceased is alleged to have made for his physician. Dr. Browning claims to have given up most of his time to his patient in his last illness; his charge was $40 an hour. The doctor testifies that his patient, in his gratitude, doubled the amount of the bill, but no record of the transaction was produced in court. Dr. Browning declares his intention of appealing the case.

Free Obstetric Hospital Troubles.—Numerous contribution boxes, between 15,000 and 20,000 it is asserted, have been distributed throughout Pennsylvania bearing a request for donations to the "Free Maternity Hospital Service of Pennsylvania." The donations have been liberal. The society, organized for the avowed purpose of caring for obstetric patients in their homes or at various hospitals, was in November last refused a charter on the ground that the amount of money collected and the expenses were out of proportion to the work accomplished. On the refusal of a charter members and directors became alarmed, the business of the concern was neglected, and a receiver has been appointed.

Personal.—Dr. William Campbell Posey has been elected attending surgeon in the Wills Eye Hospital, vice Dr. William Thomson, resigned.——The directors of the German Hospital have elected the following resident physicians for the coming year: Drs. William M. C. Bryan, J. R. Coombs, Thomas E. Bowman and Albert C. Santer. After fourteen years' service Dr. Thomas H. Andrews, chief surgeon of the Bureau of Police and Fire, has resigned.——Dr. Hilary M. Christian has been elected professor of genito-urinary surgery in the Polyclinic, vice Dr. Thomas R. Neilson, resigned.——Dr. J. Jonathan Phillips, M.R.C.S. Eng., and L.R.C.P. Lond., who is now doing special work on the eye in London, will return to Philadelphia early in the autumn.——Dr. J. Leslie Davis has resigned as a resident physician of the German Hospital, to accept the position as chief resident physician of the Mary J. Drexel Home.

Pennsylvania Hospital for the Insane.—In his annual report Dr. John B. Chapin, chief physician of the Pennsylvania Hospital for the Insane, makes especial note of the fact that fourteen patients threatened with mental disease voluntarily sought admission to the hospital. The fact raises the question of a duty to a class who are on the threshold of insanity, and how the duty can best be performed. Dr. Chapin deprecates the prejudice against insane hospitals and the legal hedge making admission difficult in mild cases. Every voluntary admission he regards as a plea for the establishment of a special department where incipient cases of insanity may have all possible chance for recovery. The inmates of the institution at the end of the hospital year numbered 451, of whom 261 were women. The daily average population was 448, of whom 253 were women. Country outings given patients last summer showed marked instances of improvement and recovery. Since 1841, 11,332 patients have been admitted. Of these, 2401 men and 2444 women recovered; 1469 men and 1557 women were much improved; 1009 men and 761 women died, and no improvement resulted in 1093 men and 598 women.

WISCONSIN.

For Children's Free Hospital Fund.—The building fund of the Children's Free Hospital, Milwaukee, now amounts to about $7000.

Weyauwega Hospital Ready.—The Waupaca County Hospital for the Chronic Insane is now finished and ready to receive patients.

Milwaukee's Death Rate.—The deaths in Milwaukee for the fiscal year just ended were 3833, equivalent to an annual mortality of 12.99 per 1000.

Personal.—Dr. and Mrs. William H. Earles, Milwaukee, are taking a tour through the northwest and Alaska.——Dr. Plinius P. Kratsch has returned to Milwaukee after eighteen months of study in Germany.

Libel Suit Dismissed.—Dr. William H. Earles' $10,000 libel suit against Dr. Horace M. Brown has been dismissed. Dr. Earles brought the suit immediately after he learned that the Milwaukee County Medical Society had filed with the State Board of Medical Examiners a number of charges against the Milwaukee Medical College, of which Dr. Earles is president.

Banquet to Dr. Solon Marks.—On July 14, at Whitefish Bay, a testimonial banquet in honor of the seventy-fifth birthday of Dr. Solon Marks, Milwaukee, was tendered by about 125 representative members of the medical profession. The occasion was highly significant of the esteem in which the

honored guest is held by his brother physicians. Dr. Marks is a pioneer in the medical and surgical history of Milwaukee and the northwest. He has enjoyed an extensive practice; has been a public-spirited citizen; and his advocacy of advanced principles in ethics and scientific medicine has given him a position of which any man might well be proud. The committee of arrangements having the banquet in charge consisted of Drs. U. O. B. Wingate, W. H. Nielson, Lorenzo Boorse and Ralph Chandler. Among those present from out-of-town points the following were noted: Dr. J. Whiting, Janesville; Dr. J. R. Barnett, Neenah; Dr. H. Reineking, Sheboygan; Dr. O. B. Reynolds, Geneva; Dr. J. V. R. Lyman, Eau Claire; Dr. J. T. Reeve, Appleton; Dr. Richard Dewey, Wauwatosa; Dr. George Henry Cleveland, Chicago, and Dr. B. M. Caples, Waukesha. Dr. Walter Kempster, Milwaukee, presided as toastmaster, and bore the responsibilities with becoming grace. One especially significant feature was the presence of no less than eight gentlemen hailing Dr. Marks as preceptor. Another pleasant feature of the evening was the presentation to Dr. Marks of a gold-headed cane from members of the faculty of the Wisconsin College of Physicians and Surgeons. Toasts were responded to by the honored guests and by Drs. Reynolds, Ladd, Brown, Kletzsch, Cleveland and others.

GENERAL.

Hawaii's Health Good.—Except for many cases of influenza the health of the islands is good. Sanitary conditions are in fair condition.

Smallpox at Nome, Alaska, will be provided for by a hospital and detention camp on Sledge Island, which is some twenty miles from Nome and a few miles from the shore.

The **Home for Incurables** at Kaimuki, Hawaii, is almost completed. Thus far, $20,000 has been expended, of which $9000 was for grounds. The equipment is to be modern and complete.

Tuberculosis Decreasing in Hawaii.—This disease, which has shown an alarming increase in the mortality returns of previous months, is reported as of lessened occurrence throughout the islands.

O'Reilly the New Surgeon General.—President Roosevelt has designated Colonel Robert M. O'Reilly to be surgeon general of the Army, to succeed General Forwood, who will retire September 7. Colonel O'Reilly will have until January, 1909, to serve as surgeon general. He was appointed from Pennsylvania as a cadet in 1864, and is a graduate of the medical department of the University of Pennsylvania.

Cholera in the Philippines continues, with a death rate among the natives of 80 per cent. The disease is checked in Manila, but is of great prevalence in the provinces. The cable announced last week that rains had checked the spread to some extent, but no permanent benefit could be expected until the heavy rains of August. The board of health will remove 40,000 natives from the slums to suburban camps under sanitary care.

Leprosy Prophylaxis.—Hawaiian officials think leprosy is decreasing. At the settlement there has been a decrease from 996 to 830 in 18 months, and they are satisfied that very few lepers are still at large. The statistics of the health department show that segregation and untiring efforts to put the afflicted ones apart from the healthy portion of the community have been the most effective means of eradicating the disease from among the islanders. The natural and logical reasons for the recent decrease are that the lepers are dying off in the settlement instead of among the general communities of the islands, where they leave infection. It is believed that those now at large number but a few souls, and that the department's efforts for the future will lie largely in caring for those confined until they pass away.

Smallpox.

Colorado: During June 88 cases of smallpox were reported, a decrease of 42, as compared with May.

Connecticut: North Grosvenordale reports 20 cases and Thompson 8 cases.

Illinois: A marked increase of smallpox in the territory surrounding Chicago is noted, and five new cases were discovered in the city during the week, three of these being imported from beyond the city limits. Cases are reported in Champaign, Urbana and Weldon, the latter being in DeWitt County.

Indiana: A vigorous effort is being made in Martin County by the Board of Health to eradicate smallpox. There have been 7 new cases in the county during the past week, making 23 in the aggregate, all of which have been strictly quarantined. Seven cases of smallpox have appeared in Kokomo. There are also cases at Bennett's switch and Cassville.——For the three months ended June 30, the secretary of the Jackson County Board of Health repofts eight cases of smallpox.——The State Board of Health's report for June shows 520 cases in the state, as compared with 692 cases in May. There were three deaths in June and one in May. The deaths occurred at Knightstown, Lewisville and at Mechanicsville. The disease in June was confined to forty-eight counties, while in May cases were found in sixty counties. Adams County has 61 cases; Knox has 47; Tippecanoe 41; Henry 38, and Jay, Lawler, Sullivan, Jennings, Pike, St. Joseph and Orange each have three. The other of the forty-eight counties have from five to twelve cases each. There were 20 cases in Grant County. The State Board of Health has made close inquiry about the 27 Indiana deaths from smallpox this year, and finds that not one person that died had ever been vaccinated. The board regards this as a potent argument for vaccination.——Hammond has seven cases, without adequate hospital facilities or sufficient quarantine. There is no compulsory vaccination law in Indiana. Chicago threatens to quarantine against Hammond unless improvement occurs.

Iowa: Rolfe and vicinity are aroused over the appearance of smallpox. Seven families are now quarantined with seven cases. All of these are reported in severe form. These are the first cases that have been in this place.

Maryland: The Washington County Commissioners are erecting a pesthouse for the treatment of smallpox patients, on the county almshouse farm.

Missouri: Prosperity reports 15 cases and Carterville 1 case.

Ohio: Frazerburg reports 9 cases; Springfield 14 cases, with 50 under quarantine; Columbus, 3; and at Sylvania the disease was discovered in a tenement house and 325 inmates are under quarantine.

Pennsylvania: Ellwood City has 17 cases.

Tennessee: In the Cairo and Belote's Bend districts of Sumner County, 17 cases are reported.

Wisconsin: The country districts between Racine and Kenosha are honeycombed with smallpox, and there are between thirty and forty cases of the disease in these districts. The people seem to be absolutely without fear of the disease. In many cases doctors are not called in to treat the patients, no quarantines are established and the disease is allowed to run wild.

Alaska: On account of the existing smallpox cases at Nome, and as a safeguard against a possible epidemic at some future time, the government has decided to establish a permanent marine hospital and detention camp at some distance from the town. The treasury department has asked the interior department for jurisdiction over Sledge Island. As soon as the necessary transfer of jurisdiction can be made the treasury department will erect the necessary buildings and establish facilities for handling contagious diseases.

Manitoba: The last patient in confinement at the smallpox quarantine was discharged July 12, and the hospital was closed. The hospital has been occupied almost continuously since last October. Of all the patients treated during that time, only one death resulted and that was in an infant one week old.

Smallpox conference: The secretary of the Ontario Board of Health, Dr. P. H. Bryce, and the secretary of the Quebec Board of Health, Dr. Lachapelle, met in conference July 16, at Ottawa, in regard to regulations calculated to secure uniformity of action in the two provinces for the suppression of smallpox. The disease in Ontario is at present well under control, although there are still some fifteen centers for infection, but in each there are not more than two or three cases. In a few weeks it is expected that the disease will be stamped out. The lumber camps in the northern portions of the two provinces will be well looked after.

United States: The number of smallpox cases reported in the United States in the first half of this year was about 38,000 and the deaths 1250 against only 30,000 cases and 513 deaths for the same period last year. The epidemic is, however, now on the wane.

CANADA.

Consumption Sanitarium Must Be Removed.—Dr. Edward Playter, who has been conducting the Highfield Consumption Sanitarium at the northern limits of the city of Toronto, has been notified by the local board of health that he must remove his institution immediately.

Staff Changes in Ontario Asylums.—Dr. McNaughton, assistant physician at the Mimico Asylum, has been trans-

ferred to the London Asylum to succeed Dr. Wilson, who has been transferred to the Hamilton Asylum. Dr. St. Charles of the Hamilton Asylum will go to Mimico. These changes will take effect August 1.

Personals.—Dr. W. B. Geikie, dean of Trinity Medical College, Toronto, is spending a month's holiday in the Province of Prince Edward Island.——Dr. R. Ernest McConnell, son of Dr. J. B. McConnell of Montreal, who has been in South Africa since November last, has been appointed senior physician in charge of the burgher camp at Volksrust in the Transvaal.

Montreal Infant Death Rate.—The question of the heavy death rate among infants during the summer months is up for discussion once more in the city of Montreal. A report which has been recently compiled shows that in various institutions in the city the deaths among infants for the past year totaled 1439. Dr. Laberge, the medical health officer, believes that the main cause lies in the humid, hot and changeable weather, and favors the organization of a society to teach young mothers how to feed, dress and generally take care of their children.

FOREIGN.

The coronation bazaar benefit for sick children in London hospitals netted $150,000.

Improvements on Mexican Hospital.—The Zarco Hospital at Lerdo, Mex., is receiving improvements to the value of $10,000.

Foundation Stone Laid.—The Duke of Connaught, on June 20, laid the foundation stone of the new wing of the Charing-Cross Hospital, London.

Large Legacy to London Hospital.—St. Thomas' Hospital, one of the largest in London, was bequeathed $2,500,000 by the late Charles Gassiot.

Nurses Strike.—All nurses at the Monterey (Mex.) Hospital refused to resume duty, June 21, because two of their number had been reprimanded by the superintendent for an unchaperoned evening stroll. Substitutes were telegraphed for from Kansas City.

Venereal Diseases in Prussia.—Professor Guttstadt has recently published the statistics compiled from the circulars sent to all the physicians in Prussia asking for particulars in regard to the number of patients in their charge on account of venereal diseases, April 30, 1900. In the entire country the total under treatment was 28.2 males and 9.24 females to every 10,000 of the total adult population. In Berlin the figures were 141.94 males and 45.73 females; in 17 cities with more than 100,000 inhabitants, 99.87 males and 27.89 females; in 42 cities with 30,000 to 100,000 inhabitants, 58.4 males and 17.6 females; in 47 towns with less than 30,000 inhabitants, 45.05 males and 16.89 females; altogether in the 107 largest towns, 93.11 males and 28.26 females, while in the remaining towns and in the country 7.95 males and 2.72 females. These figures represent the absolute minimum, of course, as 5303 out of the total of 14,507 physicians in Prussia failed to respond to the circular, and many persons do not apply for treatment, while others are in the hands of charlatans.

Cancer in Holland.—Circulars were sent to all the physicians in Holland asking for information in regard to patients under treatment October 15, 1900. Many physicians did not reply to the appeal and consequently the returns are not complete, but such as they are they show that the minimum number of persons affected is .0286 per cent. of the total population, and that the majority of cases occurred between 61 and 70, then from 50 to 60 and from 71 to 80. The intestine was the seat of the lesion in 49.88 per cent.; 275 in men and 163 in women. In 18 per cent. of all cases several members of the family were affected. Van Iterson cites the case of two families with 14 members of whom 8 are certainly and 3 probably affected with cancer. Korteweg has observed a case of cancer of the rectum in two sisters and cancer of the mamma in grandmother, mother and daughter. Viet has observed two sisters with cancer of the cervix. A hereditary disposition was apparent in 19.7 per cent. of all cases. Conjugal cancer was noted in 11 cases and infection of one person by another was admissible in 10.92 per cent. The *Gaz. Med. Belge* of April 24 gives further details of the collective inquiry.

LONDON LETTER.

Repeated Ovariotomy.

At the Edinburgh Obstetrical Society Professor Hynoch discussed the question: What was to be done with the apparently healthy ovary in cases of operation for unilateral cystic disease? The researches of Pfannensteil and Williams had shown that papillomatous growths might be associated with perfectly simple ovarian cysts, causing implantation on the peritoneum, with ascites, and yet the condition might be permanently cured in many cases by the removal of the tumor. On the other hand, one-half of the cystic carcinomata of the ovary was papillary, and gave rise to metastasis in the glands, liver and other organs. Therefore, in the case of papillary cysts, removal partial or complete of the other ovary was important because it was difficult during an operation to say whether the tumor was simple or malignant. In women about the climacteric it would probably be a safe rule to remove the unaffected ovary in every case. In younger women the production of an artificial menopause and sterility must be weighed against the slight risk of repeated ovariotomy. According to Spencer Wells' statistics only in 2.6 per cent. of unilateral ovariotomies was the repeated operation necessary, and of 228 ovariotomies 120 of the patients subsequently bore children. If patients could be kept under observation so that early manifestations of recurrence could be detected, there would not be the same danger in leaving the unaffected ovary. But recurrent papillomata spread so rapidly that when the patient came under observation operation was frequently useless. When the other ovary showed incipient disease simple puncture with the knife or cautery might be sufficient. In cases of small edematous and dermoid cysts resection of the ovary had the advantage in younger patients of probably removing the disease and leaving sufficient ovarian tissue to allow ovulation. Mere resection of a papillary cyst was not safe.

Lipoma of the Median Nerve.

At the Pathological Society Mr. H. J. Waring showed a specimen of this rare condition obtained from a man aged 38. The patient's right forearm and hand were crushed by a heavy bar of wood in June, 1895. No bones were broken, but the man was disabled from following his occupation for a period of 15 months. In June, 1896, he suffered from severe pains in the right hand and stiffness in the thumb and forefinger. Enlargement of the arm then began. Attacks of increasingly severe pain, chiefly in the region of the median nerve, occurred. When first seen, in April, 1901, the forefinger and thumb were considerably enlarged and apparently elongated. The extremity of the forefinger was bent on itself almost at a right angle so as to lie on the palmar aspect of the distal portions of the middle and ring fingers. Movements in the metacarpophalangeal joints were present, but in the interphalangeal joints were absent. A soft non-fluctuating swelling occupied the thenar eminence and radial side of the hand and extended two inches above the wrist. A hard swelling was felt in the biceps muscle a little above the elbow. Attacks of severe pain in the hand, forearm and lower part of the right side of the neck kept the patient awake at night. All the electrical reactions were normal, except that of the abductor pollicis, which could not be obtained. The region of the palmar swelling and the palmar aspect of the affected digits were very tender. Owing to difficulty in diagnosis an exploratory incision was made into the bicipital swelling. This was found to consist of hard, fibrous tissue, probably the remains of a former injury. On account of the severe pain and comparative uselessness of the limb, amputation was performed through the forearm. The median nerve was found to be thickened and had to be drawn downward in order to make the section through sound tissue. The enlargement of the forefinger, thumb, palm and forearm was found to be due to a tumor in the course of the median nerve. The tumor was composed almost entirely of fat, and appeared to consist of two parts—a lipoma around but outside the sheath of the nerve and a growth of fatty tissue between the bundles of nerve fibers. In the thumb and forefinger the branches were enormously thickened by fatty and fibrous tissue. A skiagraph revealed considerable enlargement of the phalanges and obliteration of the interphalangeal joints. Microscopic examination showed much fatty tissue within the nerve sheath, but the nerve fibers did not appear to have undergone any marked change. The injury appeared to have been the starting-point in the development of the lipoma in and around the median nerve and some of its branches. The hypertrophy of the phalanges and consequent production of the curious deformity of the index finger may have been due to altered nervous influences.

Poisoning from the Medicinal Use of Arsenic.

At the Polyclinic, Mr. Jonathan Hutchinson showed a woman with keratosis of the palms and soles. The palms were everywhere rough and dry and scattered over them were numerous little horny indurations more like corns than warts.

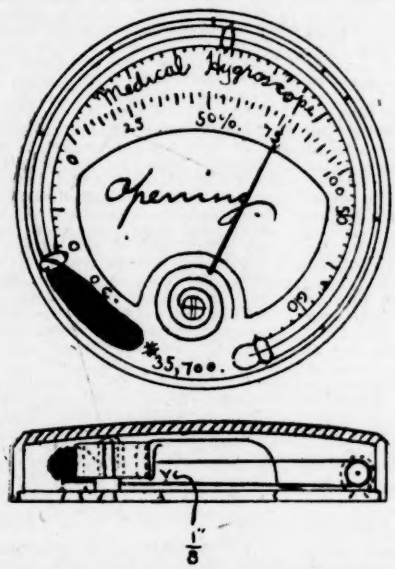
The neck was of a deep brownish-black tint, mottled with little islands of paler hue. The face was florid and somewhat bronzed, but not definitely melasmic. Eight years ago Mr. Hutchinson prescribed for the patient, who was suffering from lupus erythematosus, 4 minims of liquor arsenicalis three times a day. When Mr. Hutchinson saw the patient again two years later he advised her to discontinue the arsenic, as he thought her skin was discolored, but she did not do so. She continued the drug until August, 1901, sometimes reducing the frequency of the dose to once or twice daily in consequence of diarrhea. For a year she had coryza almost continually. Latterly, she had lost flesh and become very weak. The arsenic was discontinued and small doses of iodid and nux vomica were given. Rapid improvement followed, but the pigmentation appears likely to be permanent. Mr. Hutchinson pointed out the warning of such cases. The dose of arsenic was small, but it was continued too long. Formerly conjunctivitis was almost solely looked for as a sign of intolerance. Now it is known that it may be absent; that there are other signs of equal value—pigmentation, dryness of the palms and soles advancing to keratosis, alterations of sensations in the limbs and herpes.

Correspondence.

Medical Hygroscope with Thermometer.

3734 WALNUT ST., PHILADELPHIA, July 17, 1902.

To the Editor:—Thinking perhaps some of your readers might be interested in this instrument that measures the perspiration in relative humidity units and the surface temperature without pressure on the limbs, I enclose a photograph of it. When the thermometer is attached to the body the temperature can be read immediately by the nurse. The hygroscope is correctable by the color that the cobalt chlorid stained hygroscopic substance takes and is adjustable at the axis. The picture shows normal registration on both scales. The humidity mechanism is a spiral of very fine copper to which is attached a silk membrane dipped in chlorid of cobalt and coated with gelatin. The instrument is made of aluminum, of interchangeable aseptic parts, has a snap hinge and removable cover and is two inches in diameter. With careful attention, the instrument is correct enough to give some very interesting results, such as in the dryness of diabetics, the dryness with fever and many other conditions. Very respectfully,



HENRY EMERSON WETHERILL, M.D.,
Late surgeon Peary Arctic Expedition, 1894; surgeon Naval Reserve, Pennsylvania.

Pruritus Ani.

COGGON, IOWA, July 15, 1902.

To the Editor:—The recent article in THE JOURNAL by Edmund Andrews illustrating the use of strong heat in the treatment of pruritus ani contains some statements to which I wish to direct attention. In considering the principles involved in the treatment of pruritus by strong heat, Dr. Andrews refers to the domestic practice common among people living in northern latitudes of treating pernios or chilblains by holding each chilblain before a fire as hot as can be borne for one or two minutes, and he speaks of this treatment as being successful and entirely satisfactory. My personal experience with chilblains is not in accord with this statement.

The strong heat makes the treatment disagreeable and the chilblain is left tender and sensitive. Therefore, I have modified this domestic custom and immersed the chilblains in water of a temperature of 105 to 110 F. for about ten minutes (until the itching is subdued) and the result with me has been a treatment entirely agreeable, and one which removes the pruritus and soreness from the chilblain. Two applications usually effect a cure, but in chilblains of the feet, tight stiff leather boots must be avoided. Now if, as has been the case with me, a milder heat is more effective in chilblains than strong heat, will not a milder heat properly applied for a longer period of time prove more effective in the treatment of pruritus ani than strong heat? That is, will not water at a temperature of 105 to 110 F. properly applied for about ten minutes (until the pruritus ani is subdued) be more effective in the permanent cure of pruritus ani than water at a temperature of 130 F.?

A. J. BYERLY, M.D.

Association News.

The Chairman's Address on Stomatology: A Correction.

Dr. A. H. Peck, Chairman of the Section on Stomatology of the American Medical Association, has sent us manuscripts, which are mentioned in detail below, to authenticate his claim to the authorship of his address as Chairman given before said Section on Stomatology at the Saratoga Springs' meeting of the Association, June 10, 1902, and published in THE JOURNAL, June 21, at page 1617. The doctor says that his paper was written in the early part of 1900 and delivered to the graduating class of Northwestern University Dental School in the latter part of April, 1900, and presents several affidavits in substantiation thereof. The first affidavit is by Charles N. Reese, D.D.S., of 70 State street, Chicago, Ill., and to it is attached a pencil-written manuscript and a typewritten manuscript, both of which, by comparison, we find to be practically identical with the said address of the doctor as published in our issue of June 21. The affiant, being duly sworn, states that he recognizes and declares the said pencil-written manuscript to be the identical manuscript placed in his hands by Dr. A. H. Peck, sometime in the month of April, 1900, and that from it he made typewritten copies and that the typewritten manuscript attached to his affidavit is one of the copies which he made at that time.

The second affidavit is by Dr. Franklin R. Houston of Green Bay, Wis., who says that sometime during the early spring of the year 1900, Dr. A. H. Peck sent him an outline on the subject—"Physical Diagnosis as Related to Dental College Curricula," and that about the month of April or May of said year the doctor sent him a typewritten article entitled as above, which typewritten article he attaches to his affidavit. On examination, we find this article to be a copy of the one attached to Dr. Reese's affidavit.

The third affidavit is by Dr. Ralph W. Parker of 813 W. Harrison street, Chicago, who states that he has carefully read the copy of the paper which is attached to his affidavit and affirms that he recognizes the same to be an exact copy (as nearly as he can remember) of a paper which he distinctly remembers having heard Dr. A. H. Peck read to the graduating class of the Northwestern University Dental School during the latter part of April, 1900. The typewritten articles attached to each of the foregoing affidavits are identical. These affidavits are all executed in legal form, and after careful examination we find that, with only a few minor changes and corrections, the manuscripts attached to them are the same

as the Chairman's said address as published in THE JOURNAL.

In our issue of July 5, referring to this address, we stated that it was a plagiarism. This statement was based on the fact that a comparison of the said address with a copy of a lecture submitted to us by Dr. Cassius C. Rogers (which was accompanied by an affidavit declaring it to have been delivered prior to the Saratoga address of Dr. Peck) showed the two to be markedly similar. Our statement, however, was made without any investigation on our part as to the time Dr. A. H. Peck's address was prepared. In view of these affidavits supporting Dr. Peck's authorship, we withdraw our charge of plagiarism against him and sincerely regret the injustice that we may have done him.

We print below in parallel columns the first few paragraphs from the lecture of Dr. A. H. Peck which he claims to have delivered to his graduating class in April, 1900, and which was practically reproduced in his address, as Chairman of the Section on Stomatology, at the Saratoga Springs' meeting, and from the lecture exhibited to us by Dr. Cassius C. Rogers, who claims to have delivered the same to his class on the 16th of October, 1901.

Further evidence submitted by both claimants to the authorship of the disputed manuscripts will be mentioned in a subsequent issue at such time as we receive the final word from each claimant. With that publication the matter will end as far as the columns of THE JOURNAL are concerned.

EXTRACTS FROM THE THREE MANUSCRIPTS IN QUESTION.

FROM DR. PECK'S LECTURE, CLAIMED TO HAVE BEEN DELIVERED IN 1900:

Heretofore this subject, whenever taught at all, has received what I may term unconscious attention from various teachers; that is to say, in the regular teaching of their departments they have naturally referred to phases of physical diagnosis, but I hope the day is not far distant when the subject will have a regular place in our college curricula and thorough courses given.

The knowledge of man has steadily increased, keeping apace with civilization. Man has been brought to a higher plane through scientific investigation; his mind broadened and ripened in the fields of research. The furtherance of their profession and the elevation of their fellow-men have been uppermost in the minds of the great men of the past. As you are familiar, it was discovered ages and ages ago that teeth were filled with pieces of wood, ivory and other materials, as evidenced by the researches of the catacombs of Rome and Naples, thus assuring us that the art of preserving teeth was known to our ancestors of those very early times. Unfortunately, however, we do not know who the great dentists of those ages were, as the records of their work have been lost. Had their work been entirely satisfactory to these dentists and their patients, the latter being pleased and contented with such operations, our profession would never have attained to its present high, enviable position in this professional world.

Dissatisfaction with prevailing methods, and the laudable desire to excel, set men to thinking and to doing, the result being that dentistry has developed from an humble trade to an honored profession, affording a field for usefulness to thousands, and whereby the suffering of the entire civilized world can be and is, in a great measure, alleviated.

During the past few years the courses of study have lengthened in all professional schools. Only a short time has elapsed since a medical student could graduate after attending two courses of instruction of six months each, but now one is required to attend four years of nine months each, after having gained a good scientific or classical educatfon as a foundation upon which to build his professional knowledge, thus requiring from six to eight years of college work to receive his degree of doctor of medicine.

FROM DR. ROGERS' LECTURE, CLAIMED TO HAVE BEEN DELIVERED IN 1901:

I will spend a few minutes at the beginning of this hour in explaining somewhat the work that we will cover during the year. This work to most of you is new.

During the past year the state board of dental examiners in a number of the states have placed the branch of physical diagnosis among the studies which must be passed to secure a license to practice dentistry in their respective states.

Heretofore the subject of physical diagnosis has been given to a certain extent by several of your professors, the subject, however, only partially covered, barely enough being given to enable the men to pass the state board of dental examiners, and on one or two occasions it was the only branch in which graduates from this college failed to pass the state examinations. For that reason it was deemed wise to give a certain number of lectures to the senior class on this subject.

It will not be necessary for you to have a text-book of physical diagnosis, but if you were to purchase one I should recommend Loomis or Tyson. From the various books that I have I will select what I think would be most beneficial for a dental student and give it to you here, and all that you will be required to know to pass the examination at the end of the year and for your quizzes in the practical work will be covered in the lectures. Therefore, if you have the lectures, that will be all that is necessary, and the price that you will pay for them will be less than for any text-book that you could buy that would amount to anything.

With the advance of civilization man has steadily increased in knowledge. Scientific investigation has brought man to a higher plane, broadened his mind and ripened it in the fields of research. Our great men of the past have been those who were never tiring in the promotion of their profession and the uplifting of their fellow-men.

In searching the catacombs of Rome and Naples, teeth have been found which were filled with small pieces of wood and ivory, assuring us that the art of preserving teeth was known to our ancestors centuries and centuries ago. Unfortunately the written records of this work have been lost, and who the great dentists of that age were, no one knows. Had these men been satisfied with their work and their patients pleased and contented with such fillings, dentistry never would have gained the high place it has reached in the professional world.

Dissatisfaction with prevailing methods and the desire to excel, set men to thinking and doing, until dentistry has developed from a humble trade to an honored profession, now affording occupation for thousands of men, and whereby the sufferings of the entire civilized world can, to a certain extent, be relieved.

All professional schools have, in the last few years, lengthened their course of study. It is but a short time since a medical student could graduate after attending two courses of lectures of six months each; now a medical student is required to attend four years of nine months each after having a good scientific or classical education as a foundation upon which to build his professional knowledge, thus requiring from six to eight years of college work to receive the degree of doctor of medicine. Dentistry has not been found napping all this time; the requirements for admission to a dental college are yearly increasing, as well as the course lengthening and the number of branches studied increasing.

FROM DR. PECK'S SARATOGA ADDRESS, 1902, REPRINTED FROM ISSUE OF JUNE 21:

In view of the fact that during the past two years a number of the state boards of dental examiners throughout the country have added the subject of physical diagnosis to their list of studies, which must be passed to secure a license to practice dentistry in their respective states; also, that I have for some years been impressed with the desirability and, I may say, the necessity, of adding this subject to our dental college curricula, I concluded this would be as fit a subject as any for my paper at this time.

Heretofore this subject, whenever taught at all, has received what I may term unconscious attention from various teachers; that is to say, in the regular teaching of their departments they have naturally referred to phases of physical diagnosis, but not until the past year has the subject been made a separate department and a complete course of instruction given.

The knowledge of man has steadily increased, keeping apace with civilization. Man has been brought to a higher plane through scientific investigation; his mind broadened and ripened in the fields of research. The furtherance of their profession and the elevation of their fellow-men have ever been uppermost in the minds of the great men of the past.

As you are familiar, it was discovered ages and ages ago that teeth were filled with pieces of wood, ivory and other materials, as evidenced by the researches of the catacombs of Rome and Naples, thus assuring us that the art of preserving teeth was known to our ancestors of those very early times. Unfortunately, however, we do not know who the great dentists of those ages were, as the records of this work have been lost. Had this work been entirely satisfactory to these dentists and their patients, the latter being pleased and contented with such operations, our profession would never have attained to its present high, enviable position in this professional world.

Dissatisfaction with prevailing methods, and the laudable desire to excel, set men to thinking and to doing, the result being that dentistry has developed from a humble trade to an honored profession, affording a field for usefulness to thousands and whereby the suffering of the entire civilized world can be and is, in a great measure, alleviated.

During the past few years the courses of study have been lengthened in all professional schools. Only a short time has elapsed since a medical student could graduate after attending two courses of instruction of six months each, but now one is required to attend four years of nine months each, after having gained a good scientific or classical education as a foundation upon which to build his professional knowledge, thus requiring from six to eight years of college work to receive his degree of doctor of medicine. Let us not forget that dentistry has by no means been slumbering all the while, for the educational requirements for admission to a dental college have been steadily advancing, and the number of years and length of terms increasing, until now schooling equal to the second year of high-school work is required, and in another year four years of seven months each will be required.

Married.

HERBERT H. WILEY, M.D., to Miss Ethel Maud Ruby, both of Utica, Mich., July 2,

GEORGE F. ST. JOHN, M.D., to Miss Emily Taylor, both of Knoxville, Tenn., July 10.

JULIUS H. JACOBSON, M.D., Toledo, Ohio, to Regina Landeau, M.D., of Montreal, P. Q., July 22.

HARRY RODMAN, M.D., New York City, to Miss Edith Wymann, at Richmond, Va., July 14.

DANIEL J. HEALY, M.D., Lexington, Ky., to Louise Bergman, M.D., of Louisville, Ky., June 26.

DAVIS R. EMMONS, M.D., North Lewisburg, Ohio, to Mrs. Annie Carter of Urbana, Ohio, June 17.

HUDSON TALBOTT, M.D., St. Louis, Mo., to Miss Frances Page Tabb of Kansas City, Mo., June 25.

MALCOLM J. FARRISH, M.D., to Miss Laura Louise Bettenhausen, both of Sherburn, Minn., July 4.

WILLIAM HENRY MALEY, M.D., Galesburg, Ill., to Miss Clara Augusta Forrester of Taylorsville, Ill., June 30.

HOWELL C. DAVIES, M.D., Youngstown, Ohio, to Miss Elizabeth Tarr of Lisbon, Ohio, at Pittsburg, Pa., May 21.

JOHN JOSEPH KINDRED, M.D., New York City, to Miss Ella Welbor Cramer of Poughkeepsie, N. Y., at the American church, Luzerne, Switzerland, July 10.

GEORGE FRANKLIN SHIELS, M.D., San Francisco, late surgeon First California Volunteers in the Philippine service, to Mrs. Emily M. B. Deming of New York City, July 3.

Deaths and Obituaries.

Harry L. Hibbard, M.D. New York University, 1895, a promising young practitioner of Kansas City, Mo., for three years demonstrator of anatomy and later professor of pathology in the Kansas City Medical College; a member of the Jackson County Medical Society; a fellow in the Kansas City Academy of Medicine and assistant chief house surgeon at the city hospital for four years, died at his home, July 2, aged 37. At a special meeting of the Jackson County Medical Society, July 3, the following resolutions were adopted:

WHEREAS, Death has most untimely removed from our midst a bright and shining light of our profession in the person of Dr. Harry L. Hibbard; therefore, be it

Resolved, By the Jackson County Medical Society in special session assembled, that we keenly feel the loss of our fellow member, and desire to place on record our appreciation of him as a courteous gentleman, and a studious, accomplished and conscientious physician and surgeon.

Resolved, That we extend our sincere sympathy to his bereaved family, and furnish a copy of these resolutions to the press of Kansas City, and cause them to be spread on the minutes of this society.

(Signed) C. Lester Hall, M.D.; C. P. Cathcart, M.D.; L. C. Taylor, M.D., Committee.

(Signed) WM. FRICK, M.D., President.

E. H. THRAILKILL, M.D., Secretary.

John P. Hale, M.D. University of Pennsylvania, Philadelphia, 1844, a retired physician at Charleston, W. Va., died July 11, aged 78. He was identified with almost every enterprise connected with the progress and prosperity of Charleston, and the Kanawha Valley. It was due chiefly to his efforts that the state capitol was originally located at Charleston. For several years he was president of the State Historical Society, and for some time editor of the State Historical Magazine.

Thomas Hackett, M.D. Jefferson Medical College, Philadelphia, 1847, died suddenly from apoplexy at his country seat, "Medical Hill," near Hillsboro, Caroline County, Md., July 7, aged 76. He practiced for many years in Caroline and adjoining counties, retiring several years ago. He retained a deep interest in medical affairs, and was one of the speakers at the recent annual meeting of the Maryland Public Health Association held at Denton.

Charles C. Furley, M.D. Cooper Medical College, San Francisco, Cal., 1860, who was the first physician to practice in Wichita, Kan., died at his home in that city, July 6, from tuberculosis, aged 64. He served for two years during the Civil war as assistant surgeon in the Second California Volunteer cavalry. He was twice president of the Kansas Medical Society, and organizer and first president of the South Kansas Medical Society.

Conley Heaton, M.D. Miami Medical College, Cincinnati, 1878, died from disease of the pancreas, June 25, after a lingering illness at his home in Pomona, Cal., aged 54. He was a member of the Indiana State Medical Society; the American Medical Association; former president of the Dearborn County Medical Society and former president of the Pomona Valley Medical Society.

Jordan W. Lockwood, M.D. Bellevue Hospital Medical College, New York, 1863, surgeon of the One Hundred and Twenty-eighth New York Volunteer Infantry in the Civil war, and once president of the Columbia County Medical Society, died at his home in Philmont, N. Y., after an illness of one week, July 7, aged 68. He was a member of the American Medical Association.

John H. Kinsman, M.D. Harvard University Medical School, Boston, a member of the medical department of the army for more than 20 years, but since 1884 retired and residing in Bridgeport, Conn., died in the hospital in that city, June 26, aged 66.

Emmet F. Enos, M.D. Rush Medical College, Chicago, 1892, for five years chief of the medical staff of the Illinois Eastern Hospital for the Insane, Kankakee, died in Chicago, July 16, from acute insanity after an illness of less than two months, aged 38.

J. Brent Palmer, M.D. University of Louisville, Ky., 1896, surgeon-major of the First Kentucky Volunteer Infantry in the Spanish-American war, a promising young practitioner of Louisville, died at St. Charles' Infirmary, St. Louis, July 12.

John K. Reinoehl, M.D. University of Pennsylvania, Philadelphia, 1882, a prominent physician of Lebanon, Pa., was instantly killed in a runaway accident, July 10, near Annville, Pa., aged 43. He served two terms in the state legislature.

Henry Thomas Batts, M.D. University of Maryland, Baltimore, 1897, was shot and killed by an insane negro in Norfolk, July 10. Dr. Batts was a native of Tarboro, N. C., was coroner of Norfolk County, and was 28 years old.

Mary B. Damon, M.D. Woman's Medical College of the New York Infirmary, New York City, 1890, a practitioner of Minneapolis, aged 40, committed suicide at Weston, Mass., by cutting her throat, July 6, while despondent.

C. C. Cook, M.D. Geneva (N. Y.) Medical College, 1845, the oldest physician of Tompkins County, N. Y., and once president of the County Medical Society, died at his home in Newfield, after a long illness, June 28, aged 82.

Jules Victor Janin, M.D. Tulane University, New Orleans, La., 1878, one of the most prominent physicians of Natchitoches, La., died at Touro Infirmary, New Orleans, July 6, after an illness of nine months, aged 45.

George C. Bock, M.D. University of Giessen, Germany, 1844, a veteran of the Schleswig-Holstein war, but for nearly half a century a resident of Smithton, Ill., died at his home in that place, July 12, aged 77.

William F. Curryer, M.D. Chicago Medical College, 1883, secretary of the State Board of Medical Registration and Examination of Indiana, died suddenly from apoplexy in Indianapolis, July 5, aged 57.

William N. Oliver, M.D. Geneva (N. Y.) Medical College, 1847, died suddenly from heart disease at his home in Penn Yan, N. Y., where he had practiced for the greater part of his life, July 10, aged 79.

Louis J. Gaynor, M.D. New York University, New York City, 1891, of New Haven, Conn., died at St. Francis' Hospital, Hartford, Conn., June 26, from pneumonia, after an illness of five weeks, aged 36.

William N. Fisher, M.D. Columbian University, Washington, D. C., 1898, was accidentally killed by falling down the elevator shaft in the Columbian University Hospital, Washington, June 25.

Hiram Latham, M.D., army surgeon in the Civil war, viceconsul general to China, economist and diplomat, died at his home in Alameda, Cal., July 2, suddenly from heart disease, aged 69.

John Bell, M.D. Harvard Medical School, Boston, a practitioner of Medway, Mass., died at the home of his brother in Roxbury, July 4, from asthma, after eight years of invalidism, aged 57.

Theodore F. Koontz, M.D. College of Physicians and Surgeons, Keokuk, Iowa, 1897, died at his home in Stillwell, Ill., from consumption, July 14, after a long illness, aged 27.

E. Boyd Pendleton, M.D. University of Maryland, Baltimore, 1841, one of the best-known physicians of West Virginia, died at his home in Berkeley Springs, July 13, aged 82.

Samuel R. Acheson, M.D. Bellevue Hospital Medical College, New York, 1863, died at his home in Chilhowee, Mo., June 15, from paralysis, after an illness of several years.

Samuel A. Elbert, M.D. Medical College of Indiana, Indianapolis, 1871, an esteemed colored physician of Indianapolis, died at his home in that city, July 9, aged 70.

Burton K. Hoxie, M.D., for many years physician to the New York State Penitentiary, Auburn, N. Y., died at his home in that city, July 12, from pneumonia, aged 72.

R. Willis Rigg, M.D. College of Physicians and Surgeons, Keokuk, Iowa, 1887, died at his home in Mount Pulaski, Ill., from chronic Bright's disease, July 7, aged 44.

J. Walton Cameron, M.D. Jefferson Medical College, Philadelphia, a well-known practitioner of West Virginia, died near Charles Town, W. Va., June 26, aged 78.

Thomas R. Goulding, M.D. King's College, London, 1840, for more than fifty years a practitioner of Iron County, Mo., died at his home in Ironton, June 30, aged 85.

Jeffrey T. Sutherland, M.D. Trinity Medical College, Toronto, Ontario, 1882, died suddenly from heart disease, July 11, at his home in Leamington, Ont.

J. M. Gostin, M.D. Medical College of Georgia, Augusta, 1890, a practitioner of Houston County, Ga., died recently, after an illness of two years, aged 47.

Otho E. Lucas, Jr., M.D. Medical College of Ohio, Cincinnati, 1890, died suddenly from heart disease at his home in Greenville, Ohio, June 26, aged 35.

E. L. Grant, M.D. Louisville College of Medicine, 184—, a noted physician of Kentucky, died at his home in Petersburg, July 8, from dysentery, aged 86.

Thomas F. Phillips, M.R.C.S. Dublin; formerly surgeon in the British Army, died at his home in Newport, Ky., July 8, from typhoid fever, aged 83.

George F. Watton, M.D., died at the residence of his son-in-law, Dr. John F. Gonolin, Nashville, Ind., July 12, from stomach trouble, aged 74.

Charles F. Briggs, M.D. Medical College of Ohio, Cincinnati, 1878, died at his home in Sullivan, Ind., June 21, from heart disease, aged 54.

James Barnsfather, M.D. Cincinnati College of Medicine and Surgery, 1873, died at his residence in Dayton, Ky., July 10, from pneumonia.

John Newell Tilden, M.D. Long Island College Hospital, Brooklyn, N. Y., 1872, died at his home in Peekskill, N. Y., July 10, aged 60.

Benjamin Andrews, M.D. College of Physicians and Surgeons, New York, 1847, died at his home in Brooklyn, N. Y., June 26, aged 82.

R. A. Buchanan, M.D., one of the oldest citizens of Winnsboro, S. C., died at his home in that place, July 1, after a short illness, aged 83.

Townsend Heaton, M.D. University of Pennsylvania, Philadelphia, 1870, died at his home in Aberdeen, Ohio, July 9, aged 63.

State Boards of Registration.

Dr. Happel Reappointed.—Dr. T. J. Happel, Trenton, has been reappointed as a member of the Tennessee State Board of Medical Examiners, an office which he has held for many years.

License Revoked.—Dr. William Meffert, of Emporia, has been tried before the Kansas State Board of Medical Registration and Examination on the charges of immorality and criminal practice. By unanimous vote his license was revoked.

Japan Protests Against Hawaiian Rule.—The Japanese consul for Hawaii has presented to the Board of Health an emphatic objection to the new rule of the Board of Medical Examiners, which, as mentioned in THE JOURNAL, requires all examinations for license to practice to be conducted in English. He calls such a rule unfair to the Japanese, who, he says, are in the plurality in that territory.

Prosecutions in Ohio.—Dr. Frank Winders, secretary of the Ohio board, informs us that on July 8, W. A. France, proprietor of the so-called France Medical Institute, Columbus, was arrested for the illegal practice of medicine on complaint of the secretary of the State Board of Medical Registration and Examination. The case was tried on July 12, and the witness for the state, who had, before the complaint was filed, given evidence to the attorney for the medical board that he had been treated by France, refused to testify to the facts as given to the attorney, but on the other hand testified that France had not treated him, but that he had been treated by one H. B. Stevens, a registered physician who is in the employ of France. The witness attributed the difference in his statements of the facts of the case and his evidence on the witness stand to bad memory. The case was dismissed by the court. On July 11, D. E. Kauffman of Payne, Paulding County, was found guilty of practicing medicine illegally and was fined $20 and costs.

Results in Ohio.—We are in receipt of the results of the examination of applicants for license to practice in Ohio, which was held at Columbus, June 24 to 26. Dr. Frank Winders, the secretary, states that 49 applied, 39 passed and 10 failed. Nine subjects were taken up and 90 written questions asked; 75 per cent. was the requirement.

PASSED.

Candidate.	Sch. of Pract.	College.	Year Grad.	Per cent.
102	R.	University of Michigan, Ann Arbor.	1902	85.0
103	R.	University of Michigan, Ann Arbor.	1900	86.6
104	R.	University of Michigan, Ann Arbor.	1902	85.0
107	R.	University of Michigan, Ann Arbor.	1902	92.1
121	R.	University of Michigan, Ann Arbor.	1902	88.8
126	R.	University of Michigan, Ann Arbor.	1902	87.8
91	R.	University of Pennsylvania, Phila.	1902	90.7
112	R.	University of Pennsylvania, Phila.	1902	85.0
113	R.	University of Pennsylvania, Phila.	1900	90.7
118	R.	University of Pennsylvania, Phila.	1902	94.6
119	R.	University of Pennsylvania, Phila.	1901	85.0
124	R.	University of Pennsylvania, Phila.	1902	90.2
92	R.	Jefferson Medical College, Phila.	1899	79.5
94	R.	Jefferson Medical College, Phila.	1902	90.2
125	R.	Johns Hopkins University, Baltimore.	1902	88.2
127	R.	Johns Hopkins University, Baltimore.	1901	86.6
89	R.	College of Phys. and Surgs., Chicago.	1902	88.7
101	R.	College of Phys. and Surgs., Chicago.	1902	76.4
116	R.	College of Phys. and Surgs., Chicago.	1899	85.0
111	R.	Rush Medical College, Chicago.	1897	89.2
114	R.	Rush Medical College, Chicago.	1900	88.0
115	R.	Western U. Med. Coll., London, Can.	1902	85.5
105	R.	Northwestern U. Med. Sch., Chicago.	1900	94.2
128	R.	Coll. of Phys. and Surgs., Baltimore.	1902	92.0
99	R.	Coll. of Phys. and Surgs., Baltimore.	1902	80.0
100	R.	Med. Dept. Univ. of Buffalo, N. Y.	1900	75.0
106	R.	Baltimore Medical College.	1902	82.8
88	R.	College of P. and S., New York City.	1902	90.6
90	R.	Marion Sims Med. Coll., St. Louis.	1901	84.7
93	H.	Kansas City Homeo. Med. College.	1896	76.1
97	H.	Dunham Medical College, Chicago.	1902	78.2
98	R.	American Med. Miss. Coll., Chicago.	1902	89.8
109	R.	Miami Medical College, Cincinnati.	1871	75.0
120	R.	Starling Med. Coll., Columbus, Ohio.	1902	86.2
122	R.	Detroit College of Medicine.	1902	88.1
129	R.	Women's Med. Coll., Toronto, Canada.	1894	90.5
130	H.	Chicago Homeo. Medical College.	1902	81.5
131	R.	Harvard Medical School, Boston.	1901	90.4
136	O.	American School of Osteopathy*.	1902	77.7

FAILED.

95	R.	Ohio Medical University, Columbus.	1902	61.6
96	R.	University of Michigan.	1874	27.3
134	R.	University of Michigan.	1872	58.5
117	R.	University of Michigan.	1878	63.4
108	H.	Hom. Hospital Coll. of Cleveland, O.	1883	41.7
110	R.	Baltimore Medical College.	1902	64.0
123	R.	Detroit College of Medicine.	1894	66.7
132	R.	Barnes Medical College of St. Louis.	1902	63.1
133	R.	Ft. Wayne College of Medicine.	1902	62.0
135	R.	Kentucky School of Medicine.	1889	51.4

* Examined in anatomy, physiology, physical diagnosis and obstetrics, as provided in section 4403 of the revised statutes of Ohio.

Book Notices.

A TOPOGRAPHICAL ATLAS OF THE SPINAL CORD. By Alexander Bruce, M.A., M.D., F.R.C.P.E., F.R.S.E., Lecturer on Neurology and Practice of Medicine, Surgeons' Hall. Quarto, 32 Plates by the Photogravure Process. Price, $10.00. London, Edinburgh and Oxford: Williams & Norgate, 1901.

We are indebted to Dr. Bruce of Edinburgh for providing us with another excellent book on the nervous system. It will be remembered that a few years ago this investigator gave us, in his "Illustrations of the Mid- and Hind-Brain," a series of drawings of Weigert's preparations of exquisite beauty and unusual accuracy. For these, many students of neurology, including the most advanced specialists in the subject, have been exceedingly grateful. This time he has given us an atlas of the human spinal cord.

In the volume before us every segment of a human spinal cord is illustrated by the best methods of photographic reproduction. In addition to the views of the transverse sections through the whole cord, the mode of grouping of the various nerve cells at each level in the gray matter is shown by means

of a special accessory drawing. The plates are accompanied by a short but lucid text.

For purposes of orientation, this atlas will be of particular value. It commonly occurs that pathologists have sections of the human spinal cord presented to them without any definite history as to the exact macroscopic portion of the cord from which they have been derived. With the aid of Dr. Bruce's book, it will be possible to determine within very narrow limits the locality whence a given section has been taken. Further, aside from its value for purposes of orientation, the atlas will be helpful because it contains the most exact pictorial presentation of the different levels of the human spinal cord with which neurologists have thus far been favored. It should be in every medical library; most workers on the nervous system will desire to have it on their desks.

The publishers are to be congratulated upon the excellency of the plates and of the presswork. They and the author are fortunate in having had the aid of a private benefactor in the production of so important a volume.

A TEXT-BOOK OF INSANITY. By Charles Mercier, M.B., M.R.C.P., F.R.C.S., Lecturer on Insanity at the Westminster Hospital. Cloth. Pp. 222. Price, $1.75. London: Swan Sonnenschein & Co., Ltd. New York: The Macmillan Co. 1902.

Anything that comes from Dr. Mercier's hands may be counted a valuable contribution. In many respects this is a most excellent little manual for the student and beginner, and it has certain original features which make it specially notable. The author divides his book first into what he calls the institutes of insanity, covering the definition, analysis of the general symptoms of mental derangement and the causes of insanity, and follows this with a description of the different forms. He has his own arrangement, of which perhaps the most striking feature at first sight is his inclusion under acute insanity of all suddenly occurring and acquired forms alike, the maniacal, melancholic, acutely suicidal, etc. Stupor is separately considered. The author's psychologic views in some respects are peculiar. He is a utilitarian moralist to the extreme. His definition of morality is not, we believe, to be followed nor has it a good psychologic basis for the study of special symptoms affecting the moral function. According to him the fabric of morality rests upon a single foundation, namely, the ability to forego a pleasure or bear a pain for the instant in order that by present self-denial future benefit may be received. Every form of self-indulgence when it entails no subsequent detriment either to self or others is, he says, properly moral. We regret that the author did not forego present indulgence when he omitted to prepare an index, which means an immorality according to his definition.

CLINICAL PSYCHIATRY. A Text-Book for Students and Physicians. Abstracted and Adapted from the Sixth German Edition of Kraepelin's "Lehrbuch der Psychiatrie." By A. Ross Defendorf, M.D., Lecturer in Psychiatry in Yale University. Cloth. Pp. 420. Price, $3.50. New York: The Macmillan Co. 1902.

This is the latest work on insanity of any that have recently appeared in this country and, as the author says, is practically a synopsis of Kraepelin's views in regard to mental affections. The idea was at first to make a translation of the last edition of Kraepelin's work, but on second thought it was considered too large a work to serve the best uses and this may be rightly considered a sort of condensation or filtration by the American author. Most of the work is practically completely rewritten and not a series of extracts. There are some little things that indicate the German origin, such as certain uses of words, which might have been better if made more in accordance with the usages of our own language. The general etiology, diagnosis and treatment of Kraepelin's work has been condensed for this, but the principal items of interest have been added to the description of the various conditions. The few illustrations are excellent as illustrating the forms of insanity. We notice one thing that we think might have been altered, that is the rarity of reference to American authors, there not being over two or three in the bibliography attached to the description of the different forms of disease. There has been more work done in this country on insanity than this would indicate and some of it has been of such a character as not to deserve neglect.

THE ARTIFICIAL FEEDING OF INFANTS, Including a Critical Review of the Recent Literature of the Subject. By Charles F. Judson, M.D., Physician to the Medical Dispensary of the Children's Hospital and J. Claxton Gittings, M.D., Assistant Physician to the Medical Dispensary of the Children's Hospital. Cloth. Pp. 368. Price, $2.00. Philadelphia: J. B. Lippincott Co. 1902.

The subject of infant feeding has been well to the front for the last few years and this text-book is, therefore, a timely one. The authors have collected a large amount of material from various sources and critically discussed it. They have also given their own views. The work commences with a historical sketch of the subject, following with a description of the analysis of the materials and the consequent details, modern methods of feeding, weaning, character of the milk, bacteriology, sterilization and Pasteurization, and a tabulated statement of the weight and growth. The management of premature infants is described and the various methods of home modification of milk for infant feeding and practical rules are given. In the appendix a number of formulæ and receipts are added and the book concludes with a complete bibliography covering over 260 titles and a tolerably satisfactory index. It will be found, we think, a valuable aid to the pediatrist and also to the general practitioner, for this is a subject which is of very general interest and can hardly be slighted by anyone.

SOME THOUGHTS ON THE PRINCIPLES OF LOCAL TREATMENT IN DISEASES OF THE UPPER AIR PASSAGES, Being Two Lectures at the Medical Graduates' College and Polyclinic, on October 2 and 9, 1901. With an Appendix Consisting of Two Letters Published on November 23, 1901, and on January 11, 1902, in the British Medical Journal. By Sir Felix Semon, M.D., F.R.C.P., Physician Extraordinary to H. M. the King. Cloth. Pp. 130. Price, $1.00. London: Macmillan & Co., Ltd. 1902.

This is a reproduction of two lectures delivered before the Graduates' College and Polyclinic in London last fall, and which were published in the *British Medical Journal* of November 2 and 9 last. The discussion which was excited among laryngologists is probably fresh in the memory of many of our readers as the conservative views of Sir Felix Semon and his rather caustic criticisms of some of his contemporaries gave rise to a rather notable episode in British medicine at the time. The author regrets that he can not publish all the letters that appeared during the controversy, but the copyright law does not permit it. This is to be regretted by the readers, for they would add to the value of the volume, making it an interesting little bit of medical history. He has, therefore, only added the first and last of his own letters which are, as he says, instructive as to the opposition against the views expressed in the lectures.

A REFERENCE HANDBOOK OF THE MEDICAL SCIENCES, Embracing the Entire Range of Scientific and Practical Medicine and Allied Science. By Various Writers. A New Edition, Completely Revised and Rewritten. Edited by Albert H. Buck, M.D., New York City. Volume IV. Illustrated by Chromolithographs and 859 Half-tone and Wood Engravings. Cloth. Pp. 872. Price, $6.00. New York: Wm. Wood & Co. 1902.

A second edition of a work is too often only such in name, being merely a reissue of the same book with enough changes in the subject-matter to make it possible to call it revised. As we stated in reviewing the first volume, this issue of the Reference Handbook is more than a new edition—it is practically a new book; more than half of the matter being entirely new. Volume IV carries us from "ergot" to "infiltrations," and is in every respect equal to the preceding volume. To critically review in detail a work of such magnitude is out of the question and we can only repeat what we said of the previous volumes, that it shows that when completed this reference handbook will be as nearly as it is possible to make it, an up-to-date cyclopedia of medical science, and a reliable reference work for men in every line of practice.

PRACTICAL DIETETICS, with Special Reference to Diet in Disease. By W. Gilman Thompson, M.D., Professor of Medicine in the Cornell University Medical College in New York City. Second Edition, Enlarged and Thoroughly Revised. Cloth. Pp. 828. Price, $5.00. New York: D. Appleton & Co. 1902.

In this second edition a great deal has been added in the way of contributions to scientific dietetics published by the United States Department of Agriculture, obtained from the different experiment stations in all parts of the country. This work presents, in a practical manner, that diet best suited to the particular disease. In this way its value appeals to the general practitioner in his dealing with diseases which

require a special diet. The most suitable method of preparing the different kinds of food are described extensively. Such a work demands the attention of every practitioner of internal medicine.

Miscellany.

The doctor who does not attend the meetings of the American Medical Association does not know what a grand thing he misses. The benefit can not be figured out in dollars and cents; but the broadening of the intellect that comes from association with the best men of the profession from all parts of the country, the *esprit de corps* which can develop only from attendance at such meetings, the knowledge which one gains from listening to the papers and to the discussions, the acquaintances one makes, the social features and entertainments, the freedom from care and worry for a few days and the change from the humdrum life of the average practitioner—all these factors are infinitely superior to dollars and cents, because they make the man a better physician and the physician a better man. We advise any physician, to whom it is at all possible, to make the most strenuous effort to attend the meetings of the American Medical Association—the association which is truly representative of the medical profession of the United States.—*Merck's Archives.*

A Lesson for the Section.—Of the five sessions held by the Section of Materia Medica and Therapeutics [Saratoga meeting, A. M. A.] three were very well attended; in two the attendance was exceedingly poor. In looking for the cause we find it in the character of the papers read at those sessions. Not that the papers at the poorly-attended sessions were valueless or non-scientific; on the contrary, they were of a scientific character, and contained a good deal of information. But they were not practical—they were of a technical nature; they treated of physiology and chemistry, and these are subjects in which the general practitioner is not much interested. At any rate, he does not consider them proper subjects for society papers; he thinks, and with right, that he can get information on these subjects to better advantage from text-books and periodical literature. To listen to a lot of technical details and figures giving the percentage composition of various reagents is neither interesting nor profitable, because it leaves no impression on the memory. We noticed evidence of great impatience on the faces of practically all the listeners, and several left during the reading of the papers. If we are to learn from the past how to conduct ourselves in the future, if we wish to have our sessions well attended, then let us in the name of common sense avoid technical papers. Let us get papers which are full of practical points, which treat of true therapeutics, which are likely to elicit a lively discussion—and then the chairman will have no occasion to complain of slim attendance.—*Merck's Archives.*

The meeting that just closed at Saratoga was a grand success from every point of view. Nature seemed to do her best to make the meeting a delightful memory. The air was cool and bracing, an abundance of verdure lent its charms, the accommodations were excellent, the Section meetings and the exhibits were within a very short distance of each other, the members were overflowing with good feeling, the papers read were *mostly* of a high character (or, at least, of good quality), the discussions were interesting—in short, when Friday came around and the people saw that the end was near they all felt as if they were waking from a delightful, iridescent dream. And on parting the people freely expressed their hopes and desires that the next meeting at New Orleans might prove equally delightful and equally successful. The pathologic exhibit was very instructive. One could see with what avidity many elderly and middle-aged physicians, who apparently had not had the advantages of a course in pathology in their college days, studied the various specimens. It was to them like a liberal education in histology, pathology, and bacteriology. While the number of exhibits was not, perhaps, as large as it might have been, they were all of a high character. The House of Delegates proved a tremendous success in expediting all business matters of the Association, and we fully agree with the generally expressed opinion that it will prove one of the most potent factors in uniting and elevating the entire medical profession of the United States. Let us see to it that none but capable and worthy men—they must possess both qualifications—get into this House of Delegates. We said above that the papers read were mostly of a high character. Yes, most of of the papers were; but some of the papers were distinctly not; some were of a character to fit them for some local society in Oklahoma or Arizona, but not for the representative association of America. Some of the papers that we had to read in our capacity of censor we found to consist of transcripts from standard text-books and periodical literature. Now, this is not as it should be. One who comes to read a paper before the Association should really have something to say. One who has nothing to say should keep quiet. And the "censorship" committee, within whose province it falls to recommend the papers for publication in THE JOURNAL of the American Medical Association, should be fully imbued with the importance of its duties. It is disagreeable to reject a paper, especially if the reader happens to be a personal friend, but a duty must be performed whether disagreeable or not. *Amicus Plato, amicus Socrates, sed magis amica veritas.—Merck's Archives.*

Societies.

Grant County (Ind.) Medical Society.—At the annual meeting of this Society, held at Marion, June 24, Dr. Eli M. Whitson, Jonesboro, was elected president.

Harvard Medical Alumni Association.—The annual meeting of this Association was held in Boston, June 24, at which Drs. Richard C. Cabot, Boston, Nathaniel B. Porter, New York, and George A. Harlow, Milwaukee, Wis., were elected councilors.

Lenawee County (Mich.) Medical Association.—At the annual meeting of this Society, held in Adrian, June 10, Dr. Clifford Kirkpatrick, Adrian, was elected president; Dr. Oat Whitney, Jasper, vice-president, and Dr. D. Leroy Treat, Adrian, secretary-treasurer.

Cass County (Ind.) Medical Society.—This Society held its annual meeting at Logansport, June 26, and elected Dr. Robert Hessler, president; Dr. Henry B. Hill, vice-president; Dr. George D. Miller, secretary, and Dr. Arthur J. Herrmann, treasurer, all of Logansport.

Elkhart County (Ind.) Medical Society.—At an adjourned meeting of this Society, held in Elkhart, June 26, Dr. George W. Spohn, Elkhart, was elected president; Dr. Fred N. Dewey, Elkhart, vice-president, and Dr. Chester W. Merrill, Goshen, secretary and treasurer.

Decatur County (Iowa) Medical Society.—At the annual meeting of this Society, held in Davis City, June 19, a new constitution and by-laws were adopted; Dr. E. Warren Doolittle, Garden Grove, was elected president, and Dr. Bert L. Elker, Decatur, elected secretary.

Gage County (Neb.) Medical Society.—At the first meeting of this Society, held in Beatrice, July 1, Dr. Henry A. Given, Wymore, was elected president; Dr. A. V. Robinson, Beatrice, vice-president; Dr. Robert S. Albright, Beatrice, secretary, and Dr. James N. McKibben, Adams, treasurer.

Kentucky State Association of Colored Physicians.—This Association met in Danville, May 9, and chose Winchester as the next place of meeting. Dr. John E. Hunter, Lexington, was elected president; Dr. C. L. Agnew, Harrodsburg, secretary, and Dr. Benjamin F. Jones, Danville, treasurer.

Baltimore and Ohio Association of Railway Surgeons.—This Association met at Atlantic City, June 27 and 28, and elected the following officers: President, Dr. James W. McDonald, Fairmont, W. Va.; vice-president, Dr. H. Slicer Hedges, Brunswick, Md., and secretary and treasurer, Dr. George A. Davis, Summit Point, W. Va.

Colored State Medical Association of Arkansas.—This body held its annual meeting in Little Rock, June 26 and 27. Dr. D. Blueford Gaines, Little Rock, was elected president; Dr. J. G. Thornton, Little Rock, vice-president; Dr. J. H. Moore, Plumerville, recording secretary; Dr. F. B. Coffin, Little Rock, corresponding secretary, and Dr. John W. Rowland, Pine Bluff,

treasurer. The next meeting will be held in Pine Bluff in April, 1903.

North Dakota State Medical Society.—The annual meeting of this Society was held in Grand Forks, May 21 and 22. Vice-president, Dr. Tonnes Thams, Fargo, presided in the absence of the president, Dr. H. D. Quarry. The election of officers resulted as follows: President, Dr. George A. Carpenter, Fargo; vice-presidents, Drs. Victor H. Stickney, Dickinson, and William H. M. Phillip, Hope; secretary, Dr. E. C. Branch, Fargo, and treasurer, Dr. James A. Rankin, Jamestown. The next meeting of the Association will be held in Bismarck.

Butler County (Ohio) Medical Society.—This Society, at its regular quarterly meeting, June 25, took steps looking toward the reorganization of the Society in conformity with the recently-revised Code of Ethics of the Ohio State and American Medical Associations. A committee of three was appointed to confer as to the practicability of the plan and to report at the next meeting of the Society, to be held in September. The plan, if successfully carried through, will admit all legal practitioners of medicine into membership on an equal footing, regardless of their school.

Greene County (Ill.) Medical Society.—The physicians of Greene County met at Whitehall, June 27, and effected a temporary organization with Dr. Frank P. Norbury, Jacksonville, representing the Illinois State Medical Society, as chairman, and Dr. Henry A. Chapin, Whitehall, secretary. A committee was appointed to prepare a constitution and by-laws, and the following permanent officers were elected: President, Dr. Franklin A. Clement, Greenfield; vice-presidents, Drs. Henry W. Hand, Whitehall, and James A. Cravens, Wrightsville, and secretary and treasurer, Dr. Henry A. Chapin, Whitehall.

Dr. Joseph H. Chandler Medical Club of Delaware.—On June 18 the eighth annual meeting and lawn dinner of this organization was held at the Chandler homestead, Centreville. After the dinner the following officers were elected: Dr. Joseph H. Chandler, Centreville, president; Drs. Evan G. Shortlidge, Wilmington, Ezekiel W. Cooper, Camden, and John J. Black, New Castle, vice-presidents; Dr. F. Harvey Day, Talleyville, secretary, and Dr. Charles Green, Greenville, historian. Papers were read by Dr. Hobart Amory Hare, Philadelphia, on "Conditions of the Heart Other than Those Associated with Valvular Disease," by Dr. Edward E. Montgomery, Philadelphia, on "Surgical Treatment of Puerperal Sepsis"; by Dr. William L. Rodman, Philadelphia, on "Operative Treatment of Cancer of the Breast," and by Dr. W. Joseph Hearn, on "Tubercular Peritonitis."

Indian Territory Medical Association.—The thirty-seventh semi-annual meeting of this Association was held in South McAlester, June 4. The chief topic of discussion was regarding the best methods to drive quacks out of the territory. In the Choctaw Nation the examining board gives a severe written test for all applicants to practice, regardless of what credentials they may bring or how long they have practiced medicine elsewhere. Doctors refusing to take or failing to pass the examination are forbidden to practice, under penalty of expulsion from the Territory. Other nations are less rigid, and the tenor of the discussion was for more strictness. The following officers were elected: Dr. Fred S. Clinton, Tulsa, president; Drs. Charles D. Frick, South McAlester, and W. O. Shannon, Durant, vice-presidents, and Dr. R. J. Crabill, Wilburton, secretary and treasurer. The next meeting will be held at Muskogee.

Louisiana State Medical Society.—The twenty-third annual meeting of this Society was held in Shreveport, June 3, 4 and 5, under the presidency of Dr. T. Edgar Schumpert, Shreveport. The report on the reorganization of the Society was submitted and elicited considerable discussion. The substance of the report aims at a reorganization along lines proposed by the American Medical Association. The whole matter was finally referred to a committee of five. It was ordered that a printed copy of the proposed changes, together with suggestions to meet conditions in Louisiana, be mailed to every member of the Society during the year, with instructions to report at the next meeting of the Society. New Orleans was selected as the next place of meeting. The following officers were elected: Dr. Isadore Dyer, New Orleans, president; Drs. Hermann B. Gessner, New Orleans, E. Denegre Martin, New Orleans, William E. Barker, Plaquemine, Francis M. Thornhill, Arcadia, James C. Willis, Homer, and Charles McVea, Baton Rouge, vice-presidents; Dr. William M. Perkins, New Orleans, recording secretary; Dr. Andrew G. Freiderichs, New Orleans, and Dr. Henry S. Coeram, New Orleans, treasurer.

PHILADELPHIA COUNTY MEDICAL SOCIETY, NORTH BRANCH.

Stated Meeting, held June 19, 1902.

President, Dr. Albert M. Eaton, in the Chair.

Should Physicians Dispense?

DR. HARVEY C. MASLAND read a paper entitled "To What Extent, if at all, Should Physician's Dispense?" in which he referred to the fact that in the early history of medicine and even at the present day in the rural districts the physician was compelled to compound his own prescriptions. In thickly populated districts this was soon relegated to the druggist, who was more expert in this work, and he held sway until the introduction of the tablet triturate and the compressed tablet, which have induced many practitioners to resume the system of dispensing, the points in the favor of this method being cheapness, uniformity in strength, palatability and absorbability. The objection which often has been raised that these tablets contain inferior drugs was thought to be refuted by the fact that the majority of the manufacturers obtain the ingredients direct from the field of production, which would indicate a purer and stronger article. Another strong point in favor of tablet dispensing was that the physician could carry his medicines with him and administer at once, instead of waiting to have a prescription filled, which might play a very important part in emergency cases. The ingredients it was felt would be more thoroughly mixed than could be done by hand, and, in dispensing in this manner, the patient is prevented from constant renewing of the prescription without consulting the physician, which has a very deleterious effect. Such remedies as deteriorate with age should, of course, be dispensed by fresh prescriptions.

DR. WILLIAM S. HIGBEE thoroughly approved of physicians dispensing remedies in the shape of tablets, believing that it possessed the advantages of immediate application of the remedy without waiting to have the prescription filled and that the patient could not keep on taking the same medicine indefinitely without being seen by the physician, as is the case with prescriptions refilled time after time, and in many instances with detriment to the patient. In addition to the tablets, the speaker keeps a certain number of liquid preparations in his office, and dispenses these to his patients when indicated, believing that in both of these ways he secures much purer and more accurate compounds than by having the prescriptions filled by the patient at any drug store. While it was thought to be unethical to use prescription blanks with the names of drug stores thereon, better results have been obtained by having prescriptions filled at certain pharmacies in each neighborhood.

DR. J. CARDEEN COOPER felt that there should be no ethical objections to physicians maintaining drug stores. In regard to the question whether or not the physician should dispense, he believed that point should be decided solely from the consideration of what is best for the patient from a scientific standpoint. It was not felt, however, that any set formulas should be given for all conditions, and if the physician has not exactly the remedy at hand which he desires to prescribe, it was recommended that he write a prescription. In conclusion, he said that the scientific status of the profession would be advanced by the discontinuance of dispensing by all physicians, and the discountenancing of all proprietary remedies, prescriptions being written for liquid or tablets according to convenience of administration and physiologic action of remedies.

DR. A. BERN HIRSH gave a résumé of the development of tablet dispensing, which began about two decades ago, and which he believed had been largely augmented by the influence of the methods practiced by homeopathic physicians. The deleterious practice of prescribing some set formula for every case was deprecated and the opinion expressed that this condition of affairs would not exist if the practitioner would devote more time to the study of materia medica.

DR. WILSON BUCKBY believed that better results follow the administration of liquids than of remedies in tablet form and, that if the latter mode were employed, the tablets should be made so that they will dialyse through the tissues. He did not

consider, however, that there was anything unethical in a physician dispensing.

DR. H. BROOKER MILLS felt that the practice of dispensing by the physician had been largely augmented by the increasing tendency of certain druggists to prescribe and dispense certain remedies, to dispense proprietary remedies, and by the inclination of the patient to have certain prescriptions indefinitely refilled, simply because he believed it was doing him good. The two chief objections urged were the changes which take place, and in some instances render the tablet inert. It was admitted that this would increase commercialism, but there was felt to be no reason why the physician should not invest his money in any way he desired, either by opening a drug store or by dispensing his own medicines.

DR. CARLE LEE FELT believed that better results would be obtained if a physician could have his prescriptions put up by the same druggist, and believed that the indiscriminate manner in which prescriptions were taken by patients to different pharmacies had led many practitioners to adopt the method of dispensing themselves.

DR. WENDELL REBER expressed the opinion that the majority of physicians had been forced into dispensing by the inferior and impure quality of drugs used by some druggists. The tinctures are particularly apt to have this failing.

DR. WILLIAM K. SHEA felt that the question must be individual, depending largely upon the disposition of the patient, and he believed that just as good results could be obtained from a first-class tablet as from a liquid.

DR. SAMUEL P. GERHARD stated that he had been led to begin office dispensing by having druggists improperly fill prescriptions. The greatest objection he had to the method was the liability of the practitioner to fall into the habit of making the symptom fit the medicine rather than of molding the medicine according to the disease.

DR. LUTHER C. PETER believed that the principal questions in this connection were: 1, Is the dispensing of tablets practicable? and 2, Is it ethical to dispense tablets? Both of these he answered in the affirmative, supporting the former by the fact that it had been demonstrated that the tablets were made from the active principles of the drugs and were so soluble that they practically assumed a liquid form so soon as they entered the stomach.

DR. J. HERBERT MUDGETT was decidedly in favor of physicians dispensing their own medicines, and also believed that an increase in dietetic and hygienic treatment and a reduction in drug treatment would be followed by gratifying results.

DR. MASLAND said, in closing, that more uniform dosage could be secured by the administration of medicine in tablet form, and also that many remedies which were indicated to be given as liquids, such as the iodid and bromid of potassium, would be better administered by dissolving in water a tablet containing a known amount.

NEW HAMPSHIRE MEDICAL SOCIETY.

One Hundred and Eleventh Anniversary Meeting, held in Concord, N. H., May 15 and 16, 1902.

President, Dr. Daniel S. Adams, Manchester, in the Chair.

Public Session.

At the public session held in Wonolancet Hall on the evening of May 15, Rev. Daniel C. Roberts, D.D., addressed the society and guests on the subject of "Medical Science, Theology and Superstition," and Dr. Ernest W. Cushing, Boston, delivered an address on "The Abuses of Medical Charities." The discussion on these addresses was opened by Dr. Arthur C. Hetfenger, Portsmouth.

Annual Banquet.

The annual banquet of the society was served at the Eagle Hotel, at noon on May 16, Dr. Thomas W. Luce, Portsmouth, being the master of ceremonies.

Election of Officers.

The following officers were elected: President, Dr. Irving A. Watson, Concord; vice-president, Dr. Ezra Mitchell, Lancaster; secretary, Dr. Granville P. Conn, Concord, and treasurer, Dr. Marcellus H. Felt, Hillsboro Bridge.

MEDICAL SOCIETY OF THE STATE OF DELAWARE.

One Hundred and Thirteenth Annual Meeting, held at Newark, June 3, 1902.

President, Dr. Edward S. Dwight, Smyrna, in the Chair.

Smallpox and Vaccination.

DR. JAMES H. MORGAN, Wilmington, who had charge of the medical work of the Board of Health in the recent epidemic of smallpox at Wilmington, read an interesting paper on smallpox and its care, and gave valuable suggestions based on his practical experience in the epidemic.

DR. WILLIAM C. PIERCE, Wilmington, presented an address entitled "Some Causes for Public Objection to Vaccination," and drew valuable deductions therefrom.

Diphtheria Quarantine.

DR. A. ROBIN, state chemist and director of the State Bacteriologic and Pathologic Laboratory, Newark, discussed the length of quarantine in case of diphtheria.

Inspection of Laboratory.

The society made an inspection of the State Bacteriologic and Pathologic Laboratory of Delaware College, and Dr. A. Robin, the director, explained the details of the work carried on there.

Election of Officers.

The following officers were elected for the ensuing year: President, Dr. Robert B. Hopkins, Milton; vice-presidents, Drs. Thomas A. Enos, Townsend, and L. August Bishop, Dover; secretary, Dr. John Palmer, Jr., Wilmington; assistant secretary, Dr. Luther S. Conwell, Camden, and treasurer, Dr. William C. Pierce, Wilmington.

It was decided to hold the meeting of the society for 1903 at Dover.

OKLAHOMA MEDICAL ASSOCIATION.

Tenth Annual Session, held at Oklahoma City, May 14 and 15, 1902.

In the absence of the president and vice-president, Dr. Charles D. Arnold, El Reno, was selected presiding officer pro tem.

Welcome.

SENATOR C. PORTER JOHNSON, Oklahoma City, welcomed the association to the city, and Dr. Arnold made a brief response on behalf of the members.

Refusal of Application for Membership.

In the case of the application for membership of Dr. Standifer, of Elk City, who was not present, it was voted to maintain the rule of the society which provides that all applications for membership shall be refused when the applicants are not present.

Constitution and By-Laws.

After a considerable discussion, which dwelt chiefly with matters of creed and the admission of colored physicians to the society, the constitution and by-laws were adopted.

County Medical Association Affiliation.

DR. WALLACE E. STEELE, Lawton, representing the Comanche Medical Association, announced that that association of 35 members which he represented desired to affiliate with the territorial association under the rules of the American Medical Association and a motion was made to reconsider the constitution and by-laws and a committee was delegated to form an article to cover this matter.

Election of Officers.

The following officers were elected for the ensuing year: Dr. John H. Scott, Shawnee, president; Dr. Nicens W. Mayginnis, Stillwater, vice-president; and Eugent E. Barker, Guthrie, secretary and treasurer.

It was decided that the next meeting of the association should be held at Guthrie in November.

Therapeutics.

[It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice. Proper inquiries concerning general formulae and outlines of treatment are answered in these columns without allusion to inquirer.]

Alopecia.

S. Jessner, in *Merck's Archives*, distinguishes five varieties of baldness: 1, alopecia adnata; 2, alopecia seborrhoica; 3, alopecia areata; 4, alopecia mycotica; 5, alopecia symptomatica. The second or alopecia seborrhoica is the one which the physician is called on to treat most frequently. According to this article, the treatment begins with prophylaxis, freedom from overstrain, regulation of diet and hygiene, the avoidance of alcoholics and sexual excess. The scalp should be washed once or twice a week. The following combination is recommended for this purpose:

℞. Saponis kalinis .....℥v 150
Tinct. benzoini 3ss 2
Alcoholis q. s. ad.....℥vii 200

M. Sig.: Soak a piece of flannel in this lotion and rub well into the scalp once a day, and follow by a thorough washing with as hot water as can be borne.

[According to *Merck's Archives* sapo kalinis is made up of oleum lini 20 parts, potassii hydroxid (15 per cent. sol.) 27 parts, alcohol 2 parts.]

A sensitive, inflamed scalp requires caution, otherwise a troublesome eczema may follow. In such cases one of the following may be of service to counteract the inflammatory symptoms:

℞. Ichthyol .....m. viii | 50
Zinci oxidi
Amyli, āā .....gr. xl 2 | 65
Petrolati 3v 20

M. Sig.: Apply locally once a day; or:

℞. Acidi salicylici .....gr. viii | 5
Zinci oxidi 3iss 6
Tinct. benzoini .....m. viii | 50
Petrolati 3v 20

M. Sig.: To be applied locally to the scalp, once a day.

Another indication for treatment is to combat the insidious inflammatory condition of the scalp and to check the excessive seborrhoic action of the glands. The following combinations are recommended for this purpose, when consistent shampooing is insufficient:

℞. Sulphuris loti .....gr. xv-3i 1-4 | 50-2.65
Resorcin .....gr. viii-xl
Vaselini q. s. ad.....℥ii 60

M. Sig.: Apply thoroughly once daily; or:

℞. Sulphuris loti .....gr. xv-3i 4 | 50-2.65
Ichthyol .....gr. viii-xl
Ung. simplicis q. s. ad.....℥ii 60

M. Ft. ung. Sig.: Apply locally at bedtime and cover the head with a night cap.

He states that lotions are less reliable, but more agreeable to patients. As lotions the following are recommended:

℞. Resorcin 3ss-3i 2-4
Acidi salicylici 3ss-3i 2-4
Acidi tannici.....3iss-3iiss 6-10
Spts. camphoræ 3v 20
Olei ricini 3iss-3ii 6-8
Aq. cologne q. s. ad.....℥vii 210

M. Ft. lotio. Sig.: Apply thoroughly to the scalp; or:

℞. Resorcin .....gr. xlv-3iss 3-6
Chloralis hydratis
Acidi tannici, āā.....3iss-3iiss 6-10
Tinct. benzoini .....gtt. xv-xxx 1-2
Olei ricini 3i-3iis 4-10
Alcoholis q. s. ad.....℥vii 210

M. Ft. lotio. Sig.: to be applied locally once a day.

Some preparations of tar are occasionally valuable in seborrhea of the scalp, and the following is a good formula:

℞. Liq. carbonis deterg. 3i-3iiss 4-10
Acidi salicylici 3ss-3i 2-4
Olei ricini 3i-3ii 4-8
Tinct. benzoini 3ss 2
Aq. cologne .....℥iss 45
Alcoholis q. s. ad.....℥vii 210

M. Sig.: To be applied locally.

The treatment of alopecia areata is based on the local application of antiparasitic and irritant remedies. The scalp should be cleansed thoroughly with soap and water and the following applied:

℞. Chrysarobin 3ss 2
Vaselini .....℥i 30

M. Sig.: Rub with a brush into the bald areas. Care must be taken to protect the eyes, otherwise a conjunctivitis may be set up. This fact, together with discoloration of the face, which may arise, are objections to the use of chrysarobin.

The application of the Faradic brush is a very efficient adjuvant to the treatment with chrysarobin, as well as massage or daily friction with a rough towel.

In the mycotic forms of alopecia, caused by different microorganisms, the treatment consists in cutting the hair short and pulling the stumps of the affected areas out. This should be followed by a thorough cleansing with soap and water and tincture of iodin painted over the area; or the scalp shaved and collodium applied for four or five days. The dressing is then removed and the stumps and scales come away, when iodin should be applied every three or four days. After seven or eight weeks a cure is complete.

Another method is to cut the hair short and apply the following:

℞. Acidi carbol.
Olei petrolati, āā.....℥ii 60
Tinct. iodi
Olei ricini, āā.....℥iiiss 105
Olei rusci,* q. s. ad.....Oi 480

M. Sig.: Apply locally to the scalp once a day with a brush. On the seventh day a cleansing with olive oil and brush should be ordered and the foregoing again continued for four or five days. This cycle should be continued for three or four weeks. The following should then be employed:

℞. Sulphuris .....gr. xlv 3
Vaselini .....℥i 30

M. Sig.: Apply locally to the scalp for several days.

The treatment may then be completed by applying the following for two weeks:

℞. Resorcin
Acidi salicylici, āā.....℥ss 15
Alcoholis .....℥iv 120
Olei ricini q. s. ad.....Oi 480

M. Sig.: Apply locally.

In alopecia favosa, the hairs may best be removed with a pair of pincers. The following formulæ have been of service in this variety of alopecia:

℞. Hydrarg. bichlor. .....gr. viii | 50
Tinct. iodi .....℥ii 60

M. Sig.: Apply locally once a day; or:

℞. Acidi salicylici
Ichthyol, āā .....gr. lxxv 5
Saponis viridis
Petrolati, āā.....3v 20

M. Sig.: Apply locally once a day.

Spermatorrhea.

The following combinations have been recommended by C. Colin, in *New York Med Jour.*, in the treatment of spermatorrhea:

℞. Ichthyol .....gr. v | 30
Ext. belladonnæ.....gr. 1/6 | 01
Ext. hyoscyami .....gr. ii | 12
Ol. theobromæ .....gr. xlv 3

M. Ft. suppos. No. i. Sig.: One or two daily; or:

℞. Ung. hydrarg. .....gr. iv | 25
Ext. belladonnæ .....gr. 1/6 | 01
Ol. theobromæ .....gr. xlv 3

M. Ft. suppos; or:

* Oleum rusci is made from the European birch and is oil of birch tar.

℞. Pot. iodidi	gr. iii	20
Iodi	gr. 1/6	01
Ext. belladonnæ	gr. 1/4	015
Ol. theobrom.	gr. xlv	3

M. Ft. suppos. No. i. Sig.: Insert one daily.

Medicolegal.

Council Must Act on Nominations to Board of Health.—The Supreme Court of New Jersey says, in the case of State, on the relation of Hoell and others, vs. City Council of the City of Camden, that members of the board of health of the City of Camden are appointed on nomination of the mayor, confirmed by the city council. The mayor made nominations to fill two alleged vacancies. The council declined to act, on the theory that no vacancies existed; the offices being in possession of persons claiming unexpired title thereto. There appeared a fair ground of contention that vacancies did exist. The court holds that it was the duty of the council in good faith to act upon the pending nominations, and others that might be made, in case of rejection, so that, upon confirmation, it would be possible to test the right to the offices by quo warranto proceedings.

Liability for Refusal of Admission to Hospital.—In the case of the Illinois Central Railroad Company vs. Gheen, reported on page 785 of THE JOURNAL of March 22, 1902, the attention of the Court of Appeals of Kentucky having been, by petition for rehearing, called to certain expressions in its opinion as to the proper measure of damage, and the duty of the injured employe of the company when he was refused admittance into the hospital toward the maintenance of which the employes contributed, the court says that the language used by it was probably not as clear as it should have been, and might be open to criticism. Wherefore, in order to make plain its meaning in this regard, it responds to the petition, and modifies or explains the opinion rendered as follows: When the employe was refused admission into the company's hospital, it then became his duty to use the care and precaution that an ordinarily careful person would use, when similarly situated, to prevent further injury or damage to his hand. He was not bound to use the utmost care that any person might use, as counsel seemed to think the court held. He was bound to do all that a person of ordinary care and prudence would do to protect himself from injury when similarly situated. If he did this, and yet he suffered loss and injury, the company would be liable to him for the reasonable cost of the service and attention he would have received at the hospital. This treatment he was entitled to receive, and the company liable to render; and the cost of such service should be paid him for the time he was not admitted to the hospital, whether he in fact obtained treatment elsewhere or not, if he used ordinary care of himself while not admitted into the hospital. The company did not undertake to cure all wounds, and is not an insurer of the persons of its employes, in life or limb; but it did agree to furnish medical care and attention, nursing and board, to its sick. This liability it must make good, by payment of the reasonable cost of such service for such time as the same was not furnished. With this modification or explanation of the opinion heretofore rendered, the petition for rehearing is overruled.

Employment of Physician by Bookkeeper or Manager.—The Supreme Court of Errors of Connecticut says that the professional services—to recover for which the case of Harris vs. Fitzgerald was brought—were rendered, not to the party sued, a contractor for the construction of the roadbed of a street railway, in another town, but to a workman of his, and the main point in dispute in the trial below was whether the contractor had authorized the employment of the party suing. In his work the contractor employed his two sons, James and Jeremiah, both of full age. James was bookkeeper and timekeeper, and Jeremiah was superintendent and general manager in charge of the men on the day of the injury, it was claimed. On that day, the party suing, a physician, received a call by telephone to attend the laborer who was hurt. On the way to answer the call, he met one Rollins, with the injured man in a wagon. The man was carried to Rollins' store, near the place of the accident, where the party suing dressed his hand, and he subsequently treated him several times in his (the physician's) own town. And he claimed to have proved that one of the contractor's sons—either Jeremiah or James—told Mr. Rollins, who had since died, to take the injured man to the doctor. Moreover, he rendered a bill for said services to the contractor, who, although not paying the bill, never notified him that he disclaimed responsibility. On the other hand, the contractor claimed to have proved that he did not know of the injury to the workman, never authorized the party suing to attend him, and never authorized any person to procure surgical or medical aid for this or any other workman; that Jeremiah's duties were exclusively to figure on contracts, and to see that the work contracted for was carried on diligently and in a proper manner; and that James' duties were to keep the men's time and his father's books. The evidence left is doubtful which of the sons, if either, employed the physician. The most that the latter claimed on this point was that one or the other told Rollins to take the man to the doctor. It was not claimed that the contractor sued personally engaged him to attend to the workman; nor was it claimed, and there was no proof, that either James or Jeremiah had express authority to employ a physician in such cases; so that the vital question in the case was, as the trial court told the jury, whether the employment of the party suing was in the general line of the duties of either of the sons. Upon this question the court charged the jury as follows: "The testimony concerning James * * * is that he was the bookkeeper and timekeeper; and it is for you to determine whether the employment of a physician for the rendering of medical services * * * to an injured employe comes within the line of the duties of a bookkeeper and timekeeper. If you find that Jeremiah gave the direction * * * then it is proper for you to consider whether he, from the general scope of his employment, was authorized to employ a physician. Of course, if that was one of the things apparently within the line of such employment, why, then, the defendant (the contractor) would be liable for the acts of his agent, even if he did not confer such express power upon him." This charge, the Supreme Court holds, was not adapted to guide the jury aright in dealing with the practically undisputed evidence in this part of the case. The jury should have been told that James, as mere bookkeeper and timekeeper, had no implied authority from his father to employ the physician in this case. The jury may have found that James, and not Jeremiah, employed the party suing; and, if so, the jury were misled by the charge upon a vital point in the case. The Supreme Court also thinks that the charge with respect to Jeremiah was wrong. The jury should have been told that, if they found the facts with reference to his employment in his father's service to be as the father claimed, Jeremiah had no implied authority from his father to employ the party suing.

Current Medical Literature.

AMERICAN.

Titles marked with an asterisk (*) are abstracted below. Clinical lectures and single case reports are omitted unless of exceptional general interest.

New York Medical Journal, July 12.

1 *Brief Notes on Mitral Insufficiency. Thomas E. Satterthwaite.
2 *New Apparatus for Therapeutic Applications of the Roentgen Ray to the Larynx, Tongue, Rectum, Prostate, Cervix of Uterus, Vagina, etc. E. W. Caldwell.
3 A Case of Peliosis Rheumatica. Charles J. Aldrich.
4 Otitis Media Purulenta Treated by the Dry Method. F. W. Davis.
5 *Electric Light in Diseases of the Respiratory Organs. W. Freudenthal.
6 *Tetanus. Kenneth E. Kellogg.
7 Polyhydramnios; Its Differential Diagnosis and Treatment, with the Report of Cases. Edward P. Davis.
8 A Case of Amaurotic Family Idiocy. A. Hymanson.
9 Spinal-Cocainization, with Double Amputation on a Child. William W. Brooke.
10 The Preparation of Cow's Milk for Infant Feeding. Charles H. Gildden.

Medical News (N. Y.), July 12.

11 *Therapeutic Uses of the Organic Extracts. O. T. Osborne.
12 *Tendon Transplantation; Its History, Indications and Technic. J. Hilton Waterman.
13 A Case of Strangulated Hernia of the Ovary and Fallopian Tube. A. T. Bristow.
14 The Resurrectionists of London and Edinburgh. Francis R. Packard.

American Medicine (Philadelphia), July 12.

15 *The Efficacy of Recent Vaccination. Wm. M. Welch.
16 *Why Should We Not Treat the Gall-Bladder as We Do the Appendix? Roswell Park.
17 *A New Method of Bone Grafting; Report of a Case. A. W. Morton.
18 *The Chemic Pathology of the Saliva and Pharyngeal Secretions (Sialo-Semeiology) as a Means of Diagnosis. D. Braden Kyle.
19 *The Influence of Alcohol upon Infection and Its Use in the Treatment of Acute Infectious Diseases. S. J. Meltzer.
20 A New Inhaler Especially Intended for Operations on the Eye or Face. C. W. LeFever.
21 Surgical Observations in Berlin. N. Senn.
22 The Advance of Orthopedic Surgery. H. Augustus Wilson.

Philadelphia Medical Journal, July 12.

23 Mutism and Aphasia. (To be continued.) Herman Gutzmann.
24 *The Political Side of Medicine. John B. Roberts.
25 Report of an Epidemic of Cerebrospinal Meningitis. F. Alan G. Murray.
26 *Intestinal Anastomosis. John R. Cook.
27 *Some Points in the Treatment of Crushing Injuries Involving the Large Joints. John G. Sheldon.

Medical Record (N. Y.), July 12.

28 *Notes on a Few Cases of Hodgkin's Disease and Lymphatic Leukemia. Max Einhorn.
29 *The Treatment of Pulmonary Invalids in Favorable Climates. Earl S. Bullock.
30 *Gynecological Electrotherapeutics. Bernard S. Talmey.
31 *Malaria as a Complicating Factor in the Diagnosis of Appendicitis. Henry J. Wolf.
32 Acute Pneumatosis Gastrointestinalis. E. Castelli.

Boston Medical and Surgical Journal, July 10.

33 *The Use of Alcohol in Medicine; The Nutritive Value of Alcohol. Francis G. Benedict.
34 *The Basis for the Use of Alcohol in Therapeutics. Arthur R. Cushny.
35 *The Influence of Alcohol upon Infection and Its Use in the Treatment of Acute Infectious Diseases. S. J. Meltzer.
36 *The Common Use of Alcohol as a Beverage. Graham Lusk.

Cincinnati Lancet-Clinic, July 12.

37 Suggestive Therapeutics or Psychological Medicine. Anna G. Sedam.
38 "The Root of the Matter" Intestinal Indigestion and Malassimilation; A Few Clinical Pictures to Illustrate It. W. W. Taylor.

Pediatrics (N. Y.), July 1.

39 *The Microscopic Examination of Conjunctival Discharge. Edgar S. Thomson.
40 Acute Enterocolitis in Infancy. Louis W. Johnston.
41 *Serum Therapy in Laryngeal Diphtheria. Adolph O. Pfingst.

American Practitioner and News (Louisville, Ky.), June 15.

42 Pernicious Vomiting of Pregnancy (Hyperemesis). J. M. Krim.
43 Convergent Concomitant Strabismus. (To be continued.) Benjamin L. W. Floyd.

Virginia Medical Semi-Monthly (Richmond), June 27.

44 Tubercular Peritonitis. T. E. Potter.
45 Treatment of Internal Hemorrhoids Without Knife. George Ross.
46 Two Unusual Cases in Medicine. Lucien Lofton.
47 Red Dressings to Prevent Suppuration in Wounds. Alexander Irvine.
48 Selections from the Materia Medica of Our English Ancestors Several Centuries Ago. Edwin L. Morgan.

Northwestern Lancet (Minneapolis), July 1.

49 Puerperal Eclampsia. Harry Morell.
50 Pneumonia. Roscoe N. Jackson.
51 The Pioneer Doctors of the Minnesota Valley. J. W. B. Wellcome, Sr.
52 Squint and Other Muscular Anomalies. Edward J. Brown.

American Journal of the Medical Sciences (Philadelphia), July.

53 *Prognosis and Treatment of Tubercular Peritonitis, as Based on the Experience of the Massachusetts General Hospital for the Past Ten Years. Frederick C. Shattuck.
54 *Pneumococcic Arthritis. James B. Herrick.
55 A Case of Jacksonian Epilepsy Caused by Tumor of the Brain Relieved by Operation; Hemiplegia and Muscular Atrophy; Death in Ten Months. Charles W. Burr and William J. Taylor.
56 Two Cases of Partial Internal Hydrocephalus from Closure of the Interventricular Passages. William G. Spiller.
57 *A Case of Typhoid Fever with Trichinosis and Eosinophilia. Thomas McCrae.
58 *Fecal Impaction in Typhoid Fever, with Report of Cases. John N. Henry.
59 A Case of Chronic Interstitial Pancreatitis, with Involvement of the Islands of Langerhans in a Diabetic. J. Dutton Steele.
60 *Hypertrophy of the Lymphoid Tissue at the Base of Tongue as a Cause of Cough. Henry Jarecky.
61 A Clinical Lecture on Goiter. J. Chalmers Da Costa.
62 Orbital Abscess Associated with Antral and Ethmoidal Disease. Charles A. Oliver and George B. Wood.
63 *The Clinical Association of Cancer and Tuberculosis with Report of a Case. G. W. McCaskey.
64 Primary Carcinoma of the Urethra in Women. Hiram N. Vineberg.
65 The Use of the Roentgen Ray in Skin Cancer, etc., with Report of a Case. J. F. Rinehart.
66 A Review of the Surgical Diseases of the Gall-Bladder and Gall-Ducts and Their Treatment. Chas. L. Gibson.

Dominion Medical Monthly (Toronto), June.

67 President's Address, Ontario Medical Association. N. A. Powell.
68 Tuberculosis and the Home. Alexander McPhedran.
69 A Case of Appendicitis. J. O. Todd.
70 Prevention of the Spread of Symotic Diseases. D. Gilbert Gordon.

Journal of Cutaneous and Genito-Urinary Diseases (N.Y.), July.

71 *A Discussion of the Operative Treatment of Prostatic Hypertrophy; with the Presentation of Specimens and Models Bearing on the Subject. Bransford Lewis.
72 A Case of Mycosis Fungoides. Wm. F. Breakey.

Toledo Medical and Surgical Reporter, July.

73 Use of Cold Baths in Treatment of Typhoid Fever. J. C. Reinhart.
74 Dysentery. H. A. Root.
75 Enterocolitis. Wm. A. Dickey.
76 Some Obstinate Bladder Cases. George W. Hopkins.

Mobile Medical and Surgical Journal, June.

77 *Carcinoma of the Breast, with Special Reference to Its Inoperable Treatment. F. Goodwin DuBose.
78 *The Place of Drugs in the Treatment of Stomach Troubles. Boardman Reed.
79 *Hemorrhagic Malarial Fever. W. J. McCain.
80 Typhoid Fever. W. W. Mangum.
81 Lobar Pneumonia, with Special Reference to Treatment. W. G. Harrison.

Fort Wayne Medical Journal-Magazine, June.

82 Modern War Wounds. Frank W. Foxworthy.

Washington Medical Annals, July.

83 *Intestinal Obstruction. Edward A. Balloch.
84 Cases of Obstruction of the Bowel: 1, From Hernia; 2, From Volvulus; 3, From Tumor. Geo. T. Vaughan.
85 Case of Traumatic Rupture of Spleen; Splenectomy; Death on Sixth Day. Edward A. Balloch.
86 Neurasthenia. Joseph T. Johnson.
87 Case of Ovarian Tumor, with Twisted Pedicle and Myxofibroma of Round Ligament in Same Patient. D. G. Lewis.
88 Two Cases of Tubercular Meningitis. S. S. Adams.
89 Case of Large Fibroid of Broad Ligament. J. Wesley Bovée.
90 Case of Excision of Rectum for Incurable Stricture. I. S. Stone.
91 Case of Cancer of Neck of Uterus. J. Wesley Bovée.
92 General Tuberculosis; Probably Beginning in the Genitals. J. Ford Thompson.
93 Two Cases of Cerebral Hemorrhage and One of Cerebral Meningitis (Diplococcus Lanceolatus). D. S. Lamb.
94 Case of Ruptured Tubal Pregnancy. J. W. Bovée.
95 Rupture of Adrenals; Unilateral Hydronephrosis; Peritonitis. J. Ford Thompson.
96 Case of Splenomedullary Leukemia. Thomas A. Claytor.
97 Suprapubic Lithotomy. Benj. G. Pool.
98 Case of Constricted Appendix. J. W. Bovée.
99 Case of Primary Sarcoma of Omentum. J. Preston Miller.

Buffalo Medical Journal, July.

100 Medical Inspection of Schools. De Lancey Rochester.
101 Gunshot Wounds by the Old and New Armaments. L. A. La Garde.
102 Alcoholism: Its Control and Cure in Sanatoriums. George H. McMichael.
103 Treatment of Prostatic Disease by Hot Solutions. J. Henry Dowd.
104 Genito-Urinary Cases. J. A. Gardner and Nelson W. Wilson.

Cleveland Medical Journal, June.

105 *Myomectomy and Hysterectomy: A Comparison of the Vaginal and Abdominal Routes. Dudley P. Allen.
106 *Studies in the Twelfth Census. H. E. Handerson.
107 The Trend of Pharmacologic Research. Torald Sollmann.
108 A Large Cyst of the Liver, Apparently Originating from an Injury. Benjamin O. Coates.
109 Report of a Severe Case of Nasal Diphtheria in an Adult, with Recovery. Frank M. Harrison.

Canadian Practitioner and Review (Toronto), June.

110 Address of President of the Ontario Medical Association. Newton A. Powell.
111 Why Should We Not Treat the Gall-Bladder as We Do the Appendix? Roswell Park.
112 Roentgen Rays in Relation to Cancer. A. Groves.

Brooklyn Medical Journal, July.

113 Address, Medical Society of the County of Kings. H. A. Fairbairn.
114 *Blood-Letting: Its Past and Present Status. Gordon R. Hall.
115 Typhoid Fever. John R. Stivers.
116 *The Sphygmograph: Its Practical Value. Francis S. Kennedy.
117 The Therapeutic Management of Myocardial and Valvular Disease. Glentworth R. Butler.
118 The Relation of the Nose to the Reproductive Organs. Charles N. Cox.

Albany Medical Annals, July.

119 The Essentials of Modern Hospital Construction. Albert Vander Veer.
120 Pavilion. F. J. M. Mosher.
121 The Method Employed in Examining and Recording Pathological Material. George Blumer.
122 Aseptic Technic in the Albany Hospital. C. H. Richardson.
123 Remarks on the Method of Keeping Histories of Surgical Patients in the Albany Hospital. Arthur W. Elting.
124 The Influence of the Discovery of the Relation of Bacteria to Disease on the Practice of Medicine Exclusive of Surgery. (Continued.) H. Judson Lipes.
125 Case of Lymphatic Leukemia, Showing Degeneration of the Postero-internal Columns of the Spinal Cord. Hermon C. Gordinier and August J. Lartigau.

Kansas City Medical Index-Lancet, July.

126 Appendicitis—Some Clinical and Operative Phases of. A. H. Cordier.
127 Suppurating Dermoid: Report of a Case. J. F. Reiley.
128 The Management of Chronic Urethritis. Ernest G. Mark.
129 Rheumatic Fever. A. L. Ludwig.

St. Louis Courier of Medicine, July.

130 Some Observations on Gunshot Wounds During the Spanish-American and Philippine Wars. Francis A. Winter.
131 *The Effect of Footwear upon the Form and Usefulness of the Foot. (Concluded.) Phil Hoffman.
132 Malignant Disease of the Rectum. A. B. Cooke.
133 *The Public Control of Tuberculosis. Lawrence F. Flick.
134 The State's Duty in the Matter of Prevention of Consumption. Robert O. Cross.

Providence Medical Journal, July.

135 *Remarks on Diphtheria. John H. McCollom.
136 Report of a Case of Malignant Endocarditis. George S. Mathews.
137 The History of Smallpox in Rhode Island. Donald Churchill.
138 The Journalistic Doctor. J. W. Courtney.

Medical Summary (Philadelphia), July.

139 Infantile Diarrhea. E. C. McEachern.
140 Bright's Disease and Tuberculosis—Twin Diseases. N. B. Shade.
141 How Shall We Guard Ourselves? L. Shelby Greene.
142 Hay Fever. Geo. J. Monroe.
143 Spontaneous Combustion of the Human Body. J. L. Wolfe.
144 Total Abstinence from All Food, Except Water, to Reduce Weight in Disease. Louis Kolipuiski.
145 Practical Points in Syphilis. A. C. Griggs.

International Journal of Surgery (N. Y.), July.

146 *Carbolic Acid in the Treatment of Hydrocele, with Report of a Case. R. L. Rigdon.
147 Nose and Throat Work for the General Practitioner. (Continued.) George L. Richards.
148 The Technics of Amputations. (Continued.) R. H. Cowan.
149 The Surgical Assistant. Walter M. Brickner.
150 Vesical Calculi Successfully Removed. L. Sexton.

Medical Standard (Chicago), July.

151 A Neurological Clinic. Daniel R. Brower.
152 Practical Dietetics. A. L. Benedict.
153 Peculiar Cases of Gallstones. Valdemar Pleth.
154 Care of the Pregnant Woman. Henry E. Tuley.
155 Control of Vaccine Antitoxin and Biological Products. Adolph Gehrmann.
156 Pain and Its Indications. (Continued.) Edward C. Hill.
157 Nutrition as Now Understood. E. M. Epstein.

Journal of Eye, Ear and Throat Diseases (Baltimore), May-June.

158 Rhinological Miscellany. John R. Winslow.
159 Bacteriological Diagnosis of Membranous Inflammation of the Throat by a Simple Method. Francis C. Bayne.

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1. **Mitral Insufficiency.**—While this valvular affection is one of the most common and least serious when uncomplicated, the latter is rarely the case. In 86 per cent., according to Satterthwaite, the tables show it as associated with aortic, pulmonary, or tricuspid disease, the combination with aortic being the most common (80 per cent.). The most frequent cause of insufficiency is endocarditis, which is also most frequently caused by lithemia. Under the influence of this and other constitutional vices, vegetations form along the borders of the valves, which thicken and then retract, and the tendinous cords and papillary muscles also become infiltrated and contract, holding the valves back. Another cause is rupture of the valve. Of the inorganic or relative form there are many varieties, and it may be permanent or temporary from over-exertion, or due to aneurism or dilatation of the fatty heart. In this condition more or less blood leaks back in the left auricle during the systole, the auricle dilates and then hypertrophies, and the ventricles also hypertrophy from overwork. The most characteristic sign is a systolic murmur at the apex conveyed downward toward the axilla and scapula, usually rough and loud. The organic murmurs are softer and have more of a blowing character. Regurgitant murmurs are also intensified by slight exertion. Accentuation of the second sound over the pulmonary artery is due to the sudden closure of the pulmonary leaflet caused by the strong resistance ahead of it in the auricle. Another important sign is weakness of the second aortic sound from decreased back pressure in the right auricle. We also have increased transverse dulness from hypertrophy. In the early stage of the trouble the compensation goes hand in hand with the lesion, which is not appreciated by the patient or by those about him; and yet there will be some embarrassment of the pulmonary circulation, which will be shown by a little shortness of breath on exertion, perhaps by an increase in the pulse rate, with more or less irregularity. There may be spitting of blood from the dilated pulmonary vessels. Compensation, if fully established, is mainly through the hypertrophy of the left ventricle first, and later of the right, and in laboring men and those obliged to undergo vicissitudes, breakdown is earlier than in others. In Satterthwaite's opinion the organic insufficiency passes over eventually into stenosis or obstruction. Acute relative insufficiency is only a temporary condition which improves with rest and systematic treatment, while the forms that result from muscular weakness, as well as from infections, fatty degeneration or faulty innervation, improve synchronously with the conditions that produce them. In muscular insufficiency of the large heart, in laborers, and in adherent pericardium, there is little likelihood of compensation, because the condition that causes it is apt to be permanent. Ruptures or lapses of compensation are ushered in by relaxation of the ventricular walls causing venous congestion, first of the pulmonary system and later of the systemic. Finally, the systolic murmur grows faint and may even become inaudible owing to the deficient force of the left ventricle. The second pulmonary sound also becomes progressively weaker, owing to the yielding of the right ventricle. The surface becomes livid and there is palpitation, with a weak and intermittent pulse, the cardiac impulse becomes faint, the liver may be swollen and tender and the urine scanty and albuminous. Dropsy finally comes in and delirium cordis and death occurs. After breaking compensation the previous history must guide the diagnosis. If stenosis coexists, as it does in a large number of cases, we must expect a systolic thrill around about the apex in from 15 to 60 per cent. and a presystolic murmur in at least from 10 to 30 per cent. He reports a case showing the usual ease of diagnosis of the condition, but remarks that it is unsafe to depend too exclusively on the auscultatory murmurs. To distinguish between the mitral obstructive and the aortic regurgitant, feel the carotid pulse and not the radial, which is later than the carotid; then carry your stethoscope by successive steps from the base to the apex, and you are sure to determine which is the first and which is the second sound. He notices the tubercular signs which may cause trouble and the final distinctions in diagnosis. Ordinarily the disease is easily diagnosed.

2. **The Roentgen Rays.**—Caldwell describes a sort of speculum or tube by which he applies the Roentgen rays directly to the throat, larynx, uterus, etc. One of the difficulties mentioned is the heating of the tube, and he remarks that the static machine is better on this account than the induction coil. It is not ordinarily necessary to use a strong current of long exposure. Enough has been determined to demonstrate that these tubes may be operated satisfactorily.

5. **Electric Light in Respiratory Diseases.**—Freudenthal reports cases showing that electric light may be a very useful palliative measure in certain respiratory disorders, and in some cases of tuberculosis. He has also had good results from it in hay fever. He generally applies electric light indirectly to the face by allowing it to pass through a blue screen.

6. **Tetanus.**—Kellogg's article favors the use of carbolic acid in treatment as one of the best available methods, especially as compared with antitoxin.

11. **Organic Extracts.**—The various organic extracts and their value in therapeutics are reviewed by Osborne. Taking up first the thyroid extract, he believes that it has some value

in the late stages of exophthalmic goiter. If there are cerebral excitement, palpitation, and progressive loss of weight, thyroid treatment is contra-indicated; if the patient is sleepy, apathetic, with but little palpitation, has no headache, and is putting on weight, thyroid treatment will probably benefit the case. As regards its use in obesity he thinks it dangerous. If it is used for this purpose the dose should be small and not too often repeated. If the taking on of weight, at from forty to fifty years of age, be due to diminished secretion, then small infrequent doses should be of value, treating the case much as we would a cured case of myxedema, except that the dose of the thyroid required would be less. He thinks that many children suffer from diminished thyroid secretion as shown by the dull, heavy features, flat, flabby condition, a tendency to mucous discharge from the nose, with recurring persistent cracks of the skin and fissures, etc. While not cretins they have a tendency that way, and he has seen benefit from the use of this medication. In the disorders of the cessation of menstruation he holds that the thyroid treatment has a certain value. After the menopause, when there is a too marked taking on of flesh, we probably have a too rapid diminution of thyroid secretion, and small doses of thyroid extract would be good treatment. He suggests that the dry and wrinkly skin of old age may be due to diminished thyroid secretion, and it may also be wise to try thyroid treatment in puerperal insanity or that of the menopause, though he does not know the exact conditions. The pituitary extract is also reviewed and he holds that it has a certain established value in acromegaly, but in no other condition. He has seen it relieve the headache and improve the muscular ability, and quotes Kuh for a similar observation (Jour. A. M. A., Feb. 1, 1902). The thymus gland is the richest organ in the body in nuclein and just what its action indicates is not decided. He has employed its extract in tubercular cases and says that thymus gland treatment combined with the best hygienic, hydrotherapeutic and fresh-air surroundings, will always make the condition better. He uses only two or three three-grain tablets a day of Armour's preparation. Adrenalin has a special place in medicine and should be used in severe cases of sudden cardiac failure or shock, which should not be allowed to carry off the patient without the use of adrenalin, together with what other medication is advisable. He uses a 1 to 1000 solution in five to ten drop doses on the tongue every fifteen or thirty minutes for a few times, and then every three hours as needed. It should be used also in all conditions of low vasomotor tension, typically, of course, in Addison's disease and in the anemias. It should be used with care after fifty years of age, as the suprarenal secretion is then in the ascendant and overpowering the diminishing thyroid secretion. He has also used suprarenal tablets in a case of diabetes with apparent advantage. Solutions of the suprarenals can be used locally wherever there is mucous membrane congestion, inflammation or capillary bleeding. There is an indication for it in shock from anesthesia and narcotic poisoning. The ovarian and testicular extracts are mentioned, but their exact action is not entirely clear. He has used the parotid gland for pains of dysmenorrhea and often with success, following out the suggestions of Schober of Philadelphia and Mallett of New York, and in one case he has seen apparently remarkable effects from it in epilepsy.

12. **Tendon Transplantation.**—The first part of Waterman's article is largely a review of the literature; the latter part is given to the details and methods of operation of tendon grafting. He thinks that our knowledge of the indications, contraindications and after-treatment of tendon grafting is still in the formative period, and only after more continued and extended experience can a definite manual of operative procedure be adopted.

15. **Vaccination.**—Welch's object in writing this paper was to call attention to the protective power of vaccination, especially recent vaccination, as observed by him in recent epidemics of smallpox. With care as to recent successful vaccination he has never seen a resident physician or nurse in a smallpox hospital take the disease, and does not hesitate to say that after recent successful vaccination an individual can dwell in an atmosphere surcharged with the most virulent variolous poison, live, breathe, eat and sleep there in safety. He reports several cases illustrating this truth.

16. **Excision of the Gall-Bladder.**—Park pleads for complete excision of the gall-bladder, which he thinks has many analogies with the appendix, and is almost as useless in the economy. As far as the danger of operation is concerned he thinks one operation is hardly more risky than the other, and the same indications for early intervention exist. He has never regretted the removal of a gall-bladder, but has more than once had occasion to regret not excising it. It has become with him as much a standard procedure as removal of the appendix, and should be more generally adopted.

17. **Bone Grafting.**—Morton reports a case of comminuted fracture of tibia and fibula followed by necrosis and loss of bone which was remedied by the use of a splice of dog to the man's leg, both being put in a plaster splint. The man suffered very little pain or inconvenience after the second or third day, when the dog was restless. What hurt the man hurt the dog, and the animal soon realized this, and it was not long necessary to give him any morphin. The dog and man became very much "attached" to each other. In five weeks the cast was removed and the dog detached. The patient now goes about with a cane and has a very useful leg. The article is illustrated with skiagrams and photographs showing the operation, the first successful case, he claims, of bone transplanting by vascular attachment from animal to man.

18. **Saliva as a Means of Diagnosis.**—Kyle calls attention to the value of chemical examination of saliva as a means of diagnosis, reporting a case where there was offensive odor supposed to be due to ozena, traced to the saliva. He quotes considerably from Michaels, especially as to the principles which differentiate physiologic from pathologic saliva. Kyle suggests that the altered chemistry of saliva presents many pathologic possibilities. Some forms of indigestion and disease of the stomach are brought about and it is a well-known clinical fact that the saliva of certain individuals is exceedingly poisonous. He suggests as probable that some of the so-called reflex diseases, for example asthma, if the cause could be traced, might be found to be due to a perverted salivary secretion.

19. **Alcohol in Infection.**—Meltzer studies the effect of alcohol in the infectious diseases, claiming that it stimulates the patient by affecting a favorable distribution of the blood within the sick body and protects him against harmful excitations by stimulating some of the normal inhibitory mechanisms of the body. Personally, he is willing to be responsible for the following two statements: Alcohol in health is often a curse; alcohol in disease is mostly a blessing.

24. **The Political Side of Medicine.**—Roberts believes that doctors should go more into public life, not too early in their career but later in life, as they can be of great benefit to their fellow citizens, especially on school boards and governing boards of hospitals, etc., and in legislative assemblies where their special qualifications are often in demand. He notices the ignorance on the part of public officials frequently shown on medical matters of the highest importance to the public, and he holds, moreover, that the service on the hospital staff should be remunerated instead of being entirely gratuitous as at the present on the part of the medical profession. The political doctor who studies politics more than medicine is not the ideal, but it would be better were there some civil service arrangement for political appointments. Pull rather than proficiency now is too much considered in making an appointment for public boards, etc.

26. **Intestinal Anastomosis.**—Cook reports five cases of intestinal anastomosis, one experimental, the others on patients. Two were too late to be effective, but in two cases the result was good. In one of gunshot wound of the bowels two connections were made with Murphy buttons. Both buttons passed away within five weeks. In another case of relapse from appendicitis it was necessary to cut out 21 inches of the intestine and put in a Murphy button and drain. Recovery here occurred also in five weeks. In taking out the larger

sections of intestine, 28 and 21 inches in these two cases, he did not cut away a V-shaped piece of mesentery, but simply cut enough of the mesentery to clear the gut, and using a long ligature tied it off in one continuous gathering mass, and when the intestine was brought together he folded the mass of mesentery on itself and stitched the edges together to hasten union and prevent accident by a loop of gut slipping through it. He has not seen this method described in the literature, but he thinks it is of advantage in lessening shock.

27. **Joint Injuries.**—In two compound crushing injuries of the elbow joint with suppuration of the skin followed by suppurating arthritis, Sheldon operated as follows: the skin and injured tissue was cleaned as thoroughly as possible, and after the detached fragments of the bone had either been removed or placed in their proper positions, the joint cavity was completely closed by the suturing of ligaments or muscles, and the defect in the skin then closed. Skin incisions, made for the purpose of exposing deep structures, were sutured, but the traumatic wound was not repaired. The reasons for doing this are given by him as follows: 1. The skin and subcutaneous tissues are subjected to more trauma than are the deeper structures and more unclean material is brought in contact with and is ground into them. 2. Being subjected to more injury, the vitality of the skin and subcutaneous tissue is more reduced than is that of the deep tissues and their cleansing is more difficult and is less efficient than is that of the bones, ligaments and muscles. I believe that, in almost every case of compound crushing injury of the large joints, we can render the deep structures practically sterile, but that we can not render the skin and subcutaneous tissue sufficiently clean to prevent suppuration. If this is true, the advantages of the method of treatment herewith described are: 1. The clean joint cavity is protected from the unclean superficial structures. 2. The superficial tissues are thoroughly drained. 3. Secondary infection of the joint cavity is impossible. The possible disadvantage of the method is that, if the deep structures have not been rendered aseptic, secondary drainage becomes necessary. This objection is not a serious one, as an opening into the joint cavity can be easily made; and, if the osseous tissue is extensively injured, secondary operative interference will usually be necessary even if the joint is drained at the primary dressing. It is not always easy to tell when secondary drainage should be resorted to in cases treated by the method herewith advised. It frequently occurs that a considerable quantity of fluid may be present in an injured joint and still the joint be clean and remain so. He reports also three cases of injuries to the large joints where unusually good results were obtained by not resorting to primary drainage of the injured joint cavities.

28. **Hodgkin's Disease.**—Einhorn gives the report of a case of Hodgkin's disease and one of lymphatic leukemia, calling attention to the resemblances and distinctions of the two disorders, especially in certain cases. The difference in the condition of the blood seems to be great enough to enable one to separate Hodgkin's disease or pseudoleukemia from true leukemia, especially lymphatic leukemia. Of the two conditions, lymphatic leukemia is the more rapid in its course, though the therapy is the same. Medicinally, arsenic is mostly to be relied upon and methylene blue and the *x*-rays are worthy of trial, the latter especially in Hodgkin's disease. Pusey has reported good results from their use.

29. **Climate in Tuberculosis.**—A few of the details of an ideal climate for the tuberculous, as summed up by Bullock, are that it should be warm enough to permit out-door life all the year round, but never be so warm as to enervate, the atmosphere should be dry and the weather characterized by a maximum number of bright sunshiny days. The altitude should be from 5000 to 7000 feet. The details of treatment are discussed; rest in the open air with forced nutritious feeding applied as perfectly as possible with such accessories as palliatives for cough, night sweats, improvement in the appetite, mild exercise, etc. He thinks it rational for those who have received health from the climatic treatment to remain in the climate that favors them.

30. **Gynecologic Electrotherapeutics.**—Talmey pleads for the value of electricity in gynecology as against operative procedures in many cases.

31. **Appendicitis in Malaria.**—Affections of the vermiform appendix would seem to be capable of awakening long dormant or unsuspected malaria and the early recognition of the malarial element is of vital importance. Wolf reports cases of malaria simulating appendicitis and co-existing with appendicitis and points out the diagnostic difficulties and points of interest. He thinks the association of the two conditions is not surprising in certain localities like New York City with its malarial environment.

33. **The Nutritive Value of Alcohol.**—The general conclusions of Benedict may be stated as that alcohol has a nutritive value, being oxidized in the system, and thus furnishing fuel to the body, and that it does not necessarily influence the proteid metabolism and can not properly be designated as a proteid poison, but it can and frequently does protect the body proteids from consumption. It has, however, certain qualities which affect its value as a food. It may be said to agree with most people, and nature does not rebel against an excess but rather breeds a habit, in which respect it is not to be compared with other stimulants such as coffee or tea. The toxic properties of alcohol, however, are not shared by any other food material and must be considered as a drawback to its habitual use. Laboratory experiments give us no satisfactory data as to the effect of moderate doses on the general bodily and mental condition. We must look to the pathologist and psychologist for an answer, and it would seem to show that alcohol, even in moderate doses, has a retarding action on many vital processes and should not be used as a nutrient without full cognizance of such action. While it has a fuel value and as a protector of body material may be of great value to the physician, it would be equally manifestly unfair to deny that the latent toxic property of alcohol is such that in many, if not in the majority of cases in which it is used as a food, such use is irrational. Moreover, when we have a multitude of other materials whose nutritive value is beyond dispute, the use of alcohol as a food is entirely unnecessary in health.

34. **Alcohol in Therapeutics.**—Cushny reviews the action of alcohol, maintaining that its chief therapeutic value is in its depressant action. It is difficult to explain what use we could make of alcohol were it a cerebral stimulant. Its depressant or narcotic action has a definite effect in allaying the subjective symptoms, relieving the nervous strain and promoting the rest and comfort of the patient; its action in this way is not surpassed by any other drug. Its action on the respiratory system is a matter of dispute, but there is no question as to its effect on the circulation. He calls attention to two points bearing on its usefulness as a food in diseased conditions. One is that alcohol must be used in large quantities in order to be of any value as a food, for half a pint of whisky is equal to about two ounces of fat. This amount of whisky, however, is sufficient to cause marked cerebral symptoms, and, therefore, its action as a food may be dismissed under ordinary conditions. In certain diseased conditions the amount of alcohol is better borne and heroic measures are sometimes required. It may, therefore, be of some value under such conditions. In conclusion he sums up his remarks by saying that alcohol deserves a place in therapeutics as a narcotic, and to a less extent as a stomachic, and in certain conditions as a food.

35.—See also title 19 above.

36. **The Use of Alcohol as a Beverage.**—The general use of alcoholic beverages depends upon two specific properties: Alcoholic drinks possess flavor and they act upon the central nervous system. They produce a psychical stimulation of the flow of the gastric juice, and in this way are a stimulant to the appetite. It seems, however, to excite the gastric glands when introduced into the intestine and rectum, being different in this respect from any other drug, and while it promotes the gastric flow it indirectly promotes the pancreatic flow as well. With too much alcohol, however, there is too great an irrita-

tion and dyspepsia results. There is no doubt that alcoholic beverages taken at meal-times promote digestion by the addition of flavor, but it is very doubtful whether in normal persons continued excessive encouragement of the appetite is either necessary or desirable. The action on the nervous system is reviewed, and Lusk concludes that there is no doubt that alcohol reduces the power to do both physical and mental work. On the whole, he says the moderate use of alcohol as a beverage gives additional flavor to the food, and acts as a mild narcotic, often preceded by a period of exhilaration.

39. **Conjunctival Discharges.**—The bacteriology of conjunctival discharges is described by Thomson, who gives the different forms chiefly found, and the methods of staining. The gonococcus is one of the frequent forms in severe conjunctivitis, and the only form that could be confounded with it is the diplococcus intracellularis meningitis. It differs, however, as being mostly outside the cells and never within the nucleus; it also grows readily in cultures, while the gonococcus does not. It produces an acute purulent conjunctivitis and usually differs a little in microscopic appearance from the gonococcus, but they may be exactly alike. The pneumococcus is found frequently as the cause of acute contagious conjunctivitis, or "pink-eye," but the Weeks bacillus is by far the commonest bacterium. The diagnosis is readily made by slide smears. It is a short, thin bacillus, shorter and slightly thinner than the tubercle bacillus, and stains to nearly the same intensity as the pus cells, usually a very little deeper, but not so deep as the pus nuclei. It is, therefore, not so conspicuous as other more deeply staining germs, and the slide must be carefully and closely examined. In typical cases it occurs in large numbers lying scattered in the mucus and between the cells and the pus cells. The various forms of staphylococci occur commonly in conjunctival discharges and have very little especial significance.

41. **Diphtheria.**—The effect of serumtherapy on the mortality of diphtheria is noticed by Pfingst, who claims that it is generally held that the so-called pseudo-diphtheria bacillus is identical with the Klebs-Löffler bacillus. Contrary to most infectious diseases, the period of immunity from diphtheria is very short, lasting perhaps not longer than four to six weeks, but the immunity artificially acquired through the introduction of antitoxin into the system can, by increasing the serum according to demand, be made more absolute though not more lasting than the natural form. He finds remarkable benefit from the serum treatment., but since its employment he thinks other important measures are not given as much attention as they deserve. A brisk calomel purge to empty the alimentary tract, local antiseptic solutions in faucial cases, steam inhalations in laryngeal cases and heart stimulants to meet indications, are indispensable auxiliaries to the treatment of diphtheria.

53. **Tubercular Peritonitis.**—From a study of 98 cases in the Massachusetts General Hospital, Shattuck describes the following as the main therapeutic lessons: 1. Tubercular peritonitis may be followed by apparently complete recovery, even if complicated by tuberculosis elsewhere, either under (*a*) purely medical treatment; (*b*) tapping; (*c*) incision. 2. As in other forms of internal tuberculosis, the best possible hygienic surroundings are all important. 3. We are warranted in trying medical treatment for a time, especially under first-rate hygienic conditions, tapping the abdomen if necessary to relieve discomfort. 4. If the patient under a month or six weeks of medical treatment fails to improve, or in even less time if he seems to be losing ground, surgical treatment should be advised.

54.—See abstract in THE JOURNAL, xxxviii, p. 1325.

57. **Trichinosis in Typhoid.**—While trichinosis and typhoid have been frequently associated, McCrae remarks that the trichinosis was generally in the patient and the typhoid in the physician's imagination. He reports a case of this rare condition with a complete hematologic study of the case and calls attention to certain points of interest, especially to the persistent eosinophilia which led to a diagnosis of trichinosis.

58. **Typhoid Fever.**—Four cases are reported by Henry of fecal impaction in typhoid, which he thinks is not so uncommon as would seem from the text-books. Diarrhea may accompany the condition, and thus divert suspicion from the real state of affairs.

60. **Lingual Tonsil.**—Jarecky calls attention to the importance of the lingual tonsil in some cases as the cause of persistent cough, and reports a dozen cases which were treated with local applications or excision. Many patients have lingual tonsils without any special symptoms. The after-treatment consisted in antiseptic sprays, pieces of ice, and cocain in case of pain, which is usually of short duration. The food should be mild and soft. He remarks that in using the chemical caustics or cautery care should be taken to avoid injuring the epiglottis.

63. **Cancer and Tuberculosis.**—McCaskey's summary is that cancer and tuberculosis are so rarely associated as to indicate a mutual antagonism. In 281 cancer cases the autopsy revealed only 1¼ per cent. of tuberculosis, while in the non-cancerous it was over twenty times as great. The antagonism is not "diathetic," but is probably due to the chemical products of the two morbid processes being inimical to each other. There is rather an immediate relationship existing between the two conditions, however, in certain families, where the existence of either appears to favor the occurrence of the other, probably by lowering the resistance. The two diseases, however, are not absolutely incompatible. Either may exist in different organs of the same individual, as in the case reported, where the tuberculosis was pulmonary and the cancer was not. More rarely they may exist in the same organ and even in the same tissue. In the latter case it is probable that the primary disease was quiescent when the secondary one developed, and he makes a suggestion that in view of this probable antagonism and the occasional retrocession of cancer after the use of tuberculin, it might seem worth while in properly selected inoperable cases of cancer to try the systematic local injection of tuberculin into the cancerous tissue.

71. **Prostatic Hypertrophy.**—The various methods of operating for prostatic hypertrophy are noticed by Lewis, who reports several interesting cases. He sums up the points favoring the different operations, as follows: For the suprapubic route: 1. General enlargement of the prostate with extreme intravesical projection of the median or lateral lobes, diminishing their accessibility from the perineum. 2. Marked pedunculation of the intravesical tumors, with absence of obstruction from other sources. Favorable for the perineal route: 1. General hypertrophy, involving the median and lateral lobes, without extreme intravesical projection. 2. Large or very thick bar formation; marked compression of the urethra between the enlarged lateral lobes. 3. Excessive development of the prostate in the direction of the rectum. 4. In most cases where the patient is in good general condition and there is not a special indication favoring one of the other procedures. Favorable for the Bottini: 1. Cases of extreme debility, unable to stand one of the severer operations. 2. Cases of bar or medium sessile obstruction, of not too great dimensions. 3. Incomplete collar formation. 4. Horwitz says it should be employed as a prophylactic against further obstructive hypertrophy at the beginning of catheter-life. Suprapubic cystotomy for drainage only is a palliative measure that has certain well-defined and highly advantageous features—not with reference to curing a case of prostatic obstruction, but for the purpose of improving conditions so that curative measures may be undertaken. It can be carried out under local (infiltration) anesthesia, without adding to the seriousness of the conditions; and the drainage that it affords may work wonders in the manner mentioned. As a substitute for this incision, being even milder still in its effects, he commends a method that he has carried out on one or two cases, as follows: Suprapubic puncture with trocar and canula; withdrawal of the trocar; insertion of a soft rubber catheter through the canula into the bladder; withdrawal of the canula, leaving the catheter retained in the bladder and held in place by safety-pins and proper bandages. He drained one case for ten days in this manner and without ill effect.

77. **Cancer of the Breast.**—DuBose concludes that in all recent or primary cases complete excision is the only resource. Mercurial cataphoresis should have the preference in the secondary cases, especially when the subjacent lymphatics are extensively involved, in recurrence after operation and in all inoperable cases as a palliative measure. Oöphorectomy is indicated prior to the menopause in all recurrences and inoperable cases, regardless of other treatment, if the condition of the patient is not so bad as to make it extremely hazardous to life. Repeated *x*-ray exposures should be made in most instances till some local reaction appears, and be repeated from time to time if improvement follows. Thyroid extract should be administered in every case along with other treatment and continued till its physiologic effect is obtained. Until a specific effect is produced he thinks that several of these methods in combination should be tried where possible.

78. **Stomach Disorders.**—Reed thinks that most remedies given for dyspepsia do more harm than good, and even after a careful examination, including the modern methods in use, it is often found that hygienic and mechanical measures such as diet, free use of water, exercise, massage, electricity, etc., are better than any course of drugs. Nevertheless, certain drugs are useful at certain times, especially as palliatives, such as nerve tonics, dilute phosphoric acid, hypophosphites, etc. The rule is to begin with very small doses, gradually increasing if the effect is good. In diseases that involve the stomach, aside from the neuroses which are included above, certain measures are necessary. The alkalies are usually required in excessive secretion of HCl, whether a mere functional derangement or associated with acid gastric catarrh or with round ulcer. The choice of alkali is not a matter of indifference. If no laxative is required, sodium bicarbonate is useful in doses of from 15 to 60 gr., given two hours after each meal, and in severe cases combined for a week or so with either belladonna or atropin or sometimes a combination of sodium bicarbounate 15 gr., bismuth subnitrate 15 gr. and 10 or 20 gr. magnesia, the latter drug being adjusted so as not to allow constipation to result from the bismuth. In constipated cases the increase of magnesia is of value with the belladonna. When the hyperchlorhydria has already developed into gastric ulcer, the opportunity is afforded for some of the most brilliant results obtained in the therapeutics of any chronic disease. The patient should be kept in bed and fed for three or four weeks by the rectum, and after that, careful diet by the mouth, but no irritating food. Bismuth subnitrate and subcarbonate should also be given in doses ranging from 30 to 40 and 60 grains three times a day from the beginning of treatment. It may be necessary to give alkalies and belladonna, and after two or three weeks in bed the patient may be allowed to sit up and exercise a little, but the diet should be continued. In the lack of HCl an entirely opposite method of treatment is required, and he finds nothing so useful as the administration of official dilute HCl in doses from 5 to 30 drops, usually combined with pepsin. Sometimes the doses disagree and then the appropriate dose should be added to a half tumbler of water, and taken in sips every few minutes during the hour following each meal. The use of bitter tonics may also be of advantage in this condition, and massage and exercise if not contraindicated in cases of ulcer are useful. In atrophy strychnin may be of value, aiding the motor power of the stomach, though gymnastics, massage, hydrotherapy, electricity, and especially intragastric Faradism will accomplish more in such atonic conditions. Dilatation may result from pyloric cramp and in such conditions and in gastralgia due to excessive HCl from an unknown cause, it is possible to administer alkali in full doses. A course of arsenic may be given for the specific nervine and antineuralgic action, but in severer forms of trouble due to tumor, etc., only operation is of use. In acute gastritis, after putting the patient at rest, stopping food, and allowing water in small frequent sips only, very little medicine is required except where necessary to open the bowel, and then calomel 1/10 to 1/3 gr. every half hour may be used. Warm wet compresses over the stomach and small pieces of ice internally may also be of value. If the attack persists after the calomel is employed a mixture of bismuth, 5 to 10 grains, with ¼ to ½ drop doses of carbolic acid flavored with peppermint, frequently repeated, is very effective. In chronic atonic gastric catarrh the bismuth and carbolic mixture will accomplish generally as much as any remedy given by the mouth, but lavage every day or two with soda and common salt in the first wash water, a teaspoonful of each to the quart, followed with a weak solution of alum, ½ dram to the quart, silver nitrate, 10 to 15 grains to the quart, or other antiseptic astringents, can do still more in skilled hands, and the diet is all important. Tumors, growths and so on require operation. In displacement there is usually no need of surgery, strychnia and diet will do something; abdominal supports, gymnastics, massage, electricity, and hydrotherapy can do very much.

79. **Hemorrhagic Malarial Fever.**—McCain discusses this disease, holding that it is due partially to the effects of quinin superadded to severe malaria. For treatment he advises free catharsis above all. Mercury and salines are mentioned as the best, and he condemns in the strongest terms the use of diuretics and astringents. If active malarial parasites are found in the blood, free doses of quinin may be given, 20 gr. if the patient has no idiosyncrasy against it, and be repeated within twenty-four hours if needed. In the graver cases the parasites are apt to be lacking, and it is important that the physician should be able to examine the blood. The possible injurious effects of quinin should never be lost sight of. After the acute symptoms have passed a general tonic and reconstructive treatment is necessary, and it is advisable that persons who have had severe malarial attacks should remove to a healthy region more above the sea level, and remain there. The secretions must be looked after during the convalescence.

83. **Bowel Obstruction.**—Balloch considers an early diagnosis the main factor in the saving of life in cases of bowel obstruction. The symptoms should be easily recognized and cathartics should be withheld. Chronic, slowly increasing obstruction may, at any time, become acute, and surgical advice should be sought early. In true obstruction the only remedy is surgical intervention. The choice of operation depends upon the condition of the patient, and should, if possible, be radical. In late stages and doubtful cases undoubtedly the best plan is to establish a fecal fistula and thus gain time to get the patient in condition for a more radical operation later. General anesthesia is a distinct element of danger in operated cases, and where a fecal fistula is to be established local anesthesia should be used by preference.

105. **Myomectomy and Hysterectomy.**—In his comparison of the vaginal and abdominal routes for hysterectomy the following advantages are given for the former: 1. In cases of small uterus, and for one freely movable and low down in the pelvis. 2. Malignant growths of the intestine or uterus or of the cervix, even when they involve the vault of the vagina, may usually be removed with ease per vaginam. The question whether there is secondary infiltration outside that may be more completely removed by abdominal section is another story. 3. Myomas of the uterus, especially of the submucous variety or low down and not multiple or of large size, may usually be removed with ease per vaginam by morcellation. Large fibroids are more difficult to thus remove. 4. In a case of salpingitis of rather recent origin without dense adhesions, especially when the tubes are low down behind the uterus, the tubes and ovaries may be successfully removed per vaginam either with or without the uterus. 5. In some cases of long-standing pelvic disease possibly associated with vaginal fistula, and in weak patients unable to endure prolonged or extensive operation, the removal of the uterus per vaginam is safer than laparotomy. Cases of this sort, however, are rare of recent years, but the operation is applicable to certain difficult cases. The abdominal operation is practically suited to another series of cases: 1. Salpingitis or oöphoritis of long standing, with dense adhesions, are much better operated on by the abdominal than by the other route. 2. The abdominal operation is in Allen's opinion the wiser operation for the performance of myomectomy. It gives one a better chance to see the tumor, know its condition and decide whether the uterus should be removed or not. 3. If hysterectomy is to be performed on cases in which the uterus is bound by dense adhe-

sions, the abdominal route gives the advantage of supporting these adhesions with greater safety when the field of the operation is in full view than it is possible to do by the sense of touch alone, and if it seems desirable to employ drainage it leaves larger freedom for the operator to choose between the removal of the cervix and drainage per vaginam or drainage above the pubis. 4. In cases of very large tumors the abdominal route is without question in his opinion the more desirable method, and if fibroids in the uterus are numerous it is better to employ hysterectomy than to try enucleation. 6. In case of pregnancy complicated by fibroid so situated as to render parturition dangerous, it is not impossible, it seems to him, that the abdominal operation for the removal of the uterus is the safest procedure.

106. **The Twelfth Census.**—From his study of the twelfth census Handerson finds certain facts of interest: 1. The increase of population during the past decade, while greatest in the north central division, gives there the very least ratio of increase; the largest rate of increase, excluding the western division, still largely in process of settlement, is shown by the south central division, notwithstanding immigration has contributed very little to it. The southern section, moreover, is almost exclusively native born, and the great increase there is significant. It is true that the proportion of children to adults in the south is greatest among the negro population, but it is also true that the proportion among the whites is also large, almost 25 per cent. larger than it is in the north. The mortality in the south, while high, is mostly due to the negro population, the mortality among the whites being much less.

114. **Blood-Letting.**—The indications for blood-letting are noticed by Hall, who thinks that while it will never return to its former popularity it still has a place in therapeutics. He reports several cases which he thinks show that it is often of temporary and sometimes of permanent advantage.

116. **The Sphygmograph.**—Kennedy's article illustrates the sphygmograph and tracings in different conditions of the circulation, especially showing some of the erroneous tracings given in some text-books. The instrument, he says, is of practical value in finding disturbed conditions of the pulse before the causes thereof produce other symptoms, in following the action of drugs by watching the changes in tension which these drugs produce, in making comparisons of one side of the body with the other, and as a guide to therapeutic treatment.

131. **Foot-Wear.**—Hoffman's article on foot-wear is concluded in this number, noticing the various injuries due to tight shoes, such as ingrowing toe nails, hammer toe, the use of the high-heel shoes producing shortening of the calf muscle and metatarsalgia; also corns due to the friction of ill-fitting shoes. He remarks that we can find in some stores fairly good foot-wear for men and children, but the demand for them is not great and very few shoe dealers carry a stock of proper foot-wear for women. The reason given is that they are difficult to sell, and therefore not profitable. The proper shape of the shoe is described: The front of the inner sole should correspond in shape to and be a little wider than the front of the foot. It should allow for adduction of the forepart of the foot at the mid-tarsal joint and for separation of the toes, especially for inward motion of the great toe. To fit a normal foot, the inner edge should be straight. The shank should be wider than the weight-bearing portion of the foot-sole at this point, and should be placed well to the outer side, and not in the middle as is so frequently done. The posterior part should follow the outline of the heel. The length should be a little greater than that of the foot when bearing the body-weight. The front of the sole should not have the upward turn or spring, which tends to obliterate the transverse arch, but should be flat both from before backward and from side to side. The upper leather should be sufficiently full to allow for the thickness of the toes, and for their individual movement within the shoe, but should fit so closely over the instep as to prevent the shoe from sliding back and forth; for this reason the laced shoe is to be preferred as its tightness can be regulated. Children should wear spring heels and continue their use throughout life and they should always be very low, broad and flat. He illustrates the different forms of shoes, and calls attention to the fact that the stockings also deserve some attention and they should never be too short or too tight.

133. **Tuberculosis.**—Flick believes in the registration of tuberculosis, the establishment of sanatoria, disinfection of houses and places contaminated by tuberculous subjects and sterilization of clothing, implements and belongings of tuberculous cases. His ideas in regard to the matter are comparatively stringent.

135. **Diphtheria.**—From a study of more than 10,526 cases of diphtheria, McCollom deduces the following conclusions: 1. That the ratio of mortality of diphtheria per 10,000 of the living was very high in Boston previous to 1895. 2. That the ratio of mortality per 10,000 has been very materially reduced since the introduction of antitoxin. 3. That the percentage of mortality in the "South Department" (Boston City Hospital), is lower than that of any of the hospitals at home or abroad taken for comparison. 4. That since larger doses of antitoxin have been given the death rate has been materially reduced, this reduction having occurred in the apparently moribund cases. 5. That no injurious effect has followed the use of serum. 6. That to arrive at the most satisfactory results in the treatment of diphtheria, antitoxin should be given at the earliest possible moment in the course of the disease.

146. **Hydrocele.**—Rigdon believes in pure carbolic injections in the treatment of this condition. He has employed them for the past ten years with very gratifying results excepting in one case which he reports. In the discussion following the paper, Dr. Dudley Tait condemned the method absolutely, claiming that the modern surgical methods of eversion and total excision of the tunica vaginalis were operations in every way preferable. The former gives very little trouble and is quickly recovered from.

FOREIGN.

Titles marked with an asterisk (*) are abstracted below. Clinical lectures and single case reports are omitted unless of exceptional general interest.

British Medical Journal (London), July 5.

1 Edward Jenner: His Life, His Work, and His Writings.
2 *The Epidemiology of Smallpox in the Nineteenth Century. Arthur Newsholme.
3 *A Century of Vaccination—Smallpox Epidemics and Smallpox Mortality Before and Since Vaccination Came into Use. E. J. Edwardes.
4 On the Administration of the Laws for the Prevention of Epidemic Smallpox. Garrett Anderson.
5 Vaccination Problems for Parliament. J. C. McVail.
6 *The Complications of Vaccination. T. Colcott Fox.
7 Glycerinated Calf Lymph. F. R. Blaxall.
8 Smallpox in Glasgow, 1900-1902. J. C. McVail.
9 *Vaccination with Glycerinated Calf Lymph. Albert E. Cope.
10 *Differential Diagnosis Between Variola and Varicella. W. McConnel Wanklyn.
11 Stereoscopic Photograph of a Case of Smallpox. W. W. Stainthorpe, M.D.

The Lancet (London), July 5.

12 *Patent Foods. Robert Hutchison.
13 *The Causation and Prevention of Phthisis. Byron Bramwell.
14 On Some New Procedures for the Examination of the Blood and of Bacterial Cultures. A. E. Wright.
15 Cases of Gastrotomy for Recent Gastric Ulcer. C. W. Mansell Moullin.
16 A Few Observations on the Blood Pressure in Mental Disease, with a Note on the Treatment of Melancholia. H. de M. Alexander.
17 Vermiform Appendix, Containing Fecal Concretion on a Black Pin, Removed After Death, from a Child Aged Six Years: Illness Two Days, and No Medical Man Consulted. John D. Malcolm.
18 Difficulties in the Diagnosis of Smallpox. W. T. Freeman.
19 The Statistics of Cremation.

Journal of Tropical Medicine (London), July 1.

20 Epidemic Dysentery in Grenada During the Latter Months of the Year 1901: A Consideration of Its Cause, Symptoms, and Treatment. A. B. Duprey.
21 Three Lectures on Bilharzia. (Continued.) Frank Milton.

Annales de Dermatologie (Paris), May.

22 *Les parapsoriasis. L. Brocq.
23 Cylindroma of the Skin. Dalous.—Le cylindrome de la peau.
24 *Study of Alopecia Areata. Moty.—Note sur la pelade.

June.

25 Epitheliomata of the Scalp. W. Dubreuilh and B. Auché.—Epithéliomes bénins multiples du cuir chevelu.
26 Sur la blastomycose cutanée. J. Méneau (Bourboule).
27 Le dermographisme rouge et blanc. Nicolski (Warsaw).

Archives de Neurologie (Paris), June.

28 Significance of Hemianopsia in Differentiation of Cerebral Lesions. F. Raymond.—Sur 3 cas d'hémianopsie.
29 Contribution à la psychologie de la genèse des hallucinations psycho-motrices. N. Vaschide and C. Vorpas.
30 5 observations de paralysie générale conjugale. P. Keraval.

Bulletin de l'Acad. de Med. (Paris), June 24.

31 Instrument for Rhythmic Traction of the Tongue. J. V. Laborde.—Le tracteur mécanique ou automatique pour les tractions rhythmées de la langue.
32 Sur l'assistance médicale indigène à Madagascar. Kermorgant and others.
33 Cas de mycétome à grains noirs. A. Laveran.

Presse Medicale (Paris), June 25 to July 2.

34 (No. 51.) La position déclive. F. Jayle.
35 Maladies de la nutrition. Refutation de la théorie de l'hypoacidité. O. Martin (Vichy).
36 (No. 52.) *La cure de diurèse dans les infections biliaires chron. J. Cottet (Evian).
37 The Principal Alterations in Meats. H. Martel.—Principales altérations des viandes.
38 (No. 53.) Traitement de la syphilis par injections de cacodylate iodo-hydrargyrique. J. Dumont.
39 Accouchement forcé et accouchement chirurgicale. Thoyer-Rozat.
40 *Du massage et de la mobilisation dans les phlébites. M. Marchais.

Progres Medical (Paris), May 2 to June 21.

41 (No. 18.) Leçons de thérapeutique oculaire. A. Darier.
42 Hématurie hystérique; 3 cas. B. Guisy (Athens).
43 (No. 19.) Electric Treatment of Impotence. A. Laquerrière.—De l'impuissance sexuelle et de son traitement électrique.
44 Localisations cérébrales et épilepsie jacksonienne. Mirallié.
45 (No. 20.) Des injections de paraffine dans les cas de deformations du nez. J. Baratoux.
46 *Les courants de haute frequence endermatologie. L. R. Régnier.
47 Hemorrhages from Skin and Mucosa During and After Epileptic Seizures. Bourneville.—Hémorragies de la peau et dese muqueuses pendant et après les accès d'épilepsie; leur analogie avec les stigmates des extatiques.
48 (No. 21.) A propos de l'appendicite. L. Picqué.
49 (No. 23.) Un cas d'exostoses multiples. E. Albert-Weil.
50 Canitie partielle congénitale hereditaire. Bourneville.
51 (No. 24.) *Maladie des jeunes chiens. C. Phisalix.
52 (No. 25.) *Treatment of Gonorrheal Rheumatism. A. Guépin.—Traitement du rhumatisme blennorrhagique.

Centralblt. f. Chirurgie (Leipsic), June 28.

53 Operation on Paralytic Club-Foot. A. Schanz (Dresden).—Zur Operation des paralytischen Klumpfusses.
54 Transactions of Thirty-first German Congress of Surgery (147 pages).

Correspondenz-Blt. f. Schweiz. Aerzte (Basle), May and June.

55 (No. 9.) Fracture of the Scaphoid Bone. C. Kaufmann.—Weitere Mitteilungen über den Bruch des Schiff-oder Kahnbeines der Hand.
56 Diagnostic Significance of Fever in Childhood. G. Rheiner.—Ueber den diagnostischen Wert des Fiebers im Kindesalter. (Concluded.)
57 (No. 10.) Review of Recent Research on Immunity. W. Silberschmidt.—Die neueren Ergebnisse auf dem Gebiete der Immunitätsforschung.
58 Ueber das Vorkommen hyaliner und granulirter Cylinder in eiweissfreiem Urin. M. M. Craandyk.
59 (No. 11.) Soldiers' Foot Tumors. H. Meyer.—Ueber die so-gen. Fussgeschwulst der Soldaten.
60 Primrose Dermatitis. A. Gassmann.—Ueber die durch Primula obconica erzeugte Hautkrankheit und über einen durch Primula sinensis verursachten Dermatitisfall.
61 (No. 12.) Surgical Treatment of Gastric Ulcer. Sahli.—Zur chir. Behandlung des Magengeschwürs.
62 Paralysis in the Domain of the Sacral Roots. Dubois.—Radiculäre Lähmung im Bereiche der Sacralwürzeln.
63 Differential Value of Protargon in Exploratory Puncture of Thorax. R. Zollikofer.—Ueber den Befund von Protargonhaltigen Körnern bei Probepunktionen des Thorax und über das Vorkommen derselben in Tumoren und anderen Affektionen der Lunge.

Dermatologisches Centblt. (Berlin), May.

64 Ein Beitrag zur Prophylaxe der Geschlechtskrankheiten. R. Michels.
65 Fall von Urethritis ohne bekannte Aetiologie. A. Wolff.

June.

66 *Treatment of Papillomata of the Urethra. J. J. Karvonen (Helsingfors, Finland).—Die Behandlung der Papillome der Harnröhre.

Deutsche Med. Wochenschrift (Berlin and Leipsic), June 26.

67 Sahli's Functional Test of the Stomach. E. v. Koziczkowsky (Kissingen).—Ueber die klin. Verwerthbarkeit der Sahli'schen Methode zur Funktionsprüfung des Magens.
68 Venous Thrombosis in Articular Rheumatism. A. Hess.—Zur Kenntniss der Venenthrombose beim akuten Gelenkrheumatismus.
69 Acid-Resisting Bacteria. A. Moeller (Belzig).—Ueber säurefeste Bakterien.
70 Affections Caused by the Trichocephalus dispar. E. Becker (Charlottenburg).—Ueber die durch T. d. verursachten Krankheiten.
71 Determination of Quality of Human Milk by the Microscope. A. Winter.—Die Beurtheilung der Qualität der Frauenmilch nach ihrem mikroscopischen Bilde.
72 Campaign Against Tropical Malaria. Beyer (Lome, Togo).—Zur Frage der Bekämpfung der Malaria in unseren westafrikanischen Kolonien.

Klin. Therap. Wochenschrift (Vienna), June 8 to 29.

73 Severe Unusual Forms of Malaria. G. M. de Francesco (Monteleone, Calabria).—Ueber einige schwere Formen von Malaria.
74 Results of Physical Methods of Treating Heart Disease. A. Loebel (Dorna-Vienna).—Die Leistungen der physikalischen Herzheilmethoden. (Commenced in No. 20.)
75 (No. 26.) *The Curative Action of Serum a Cell Activity. Von Niessen (Weisbaden).—Die Heilwirkung des Serums als Zellthätigkeit.
76 Laryngeal Tuberculosis and Its Treatment with Mineral Water. O. Hamm (Braunschweig).—Die Kehlkopftuberculose und ihre Behandlung mit Lippspringer Arminius-Quelle. (Commenced in No. 25.)

Muenchener Med. Wochenschrift, June 24.

77 Ueber die Erzeugung hämolytischer Amboceptoren durch Seruminjektion. J. Morgenroth.
78 Fall von Impftuberkulose eines Schlachthausarbeiters durch tuberkulöse Organe eines Rindes. P. Krause.
79 Study of Consequences of Infantile Lues. A. Martin (Jena).—Statistische Untersuchung über die Folgen infantiler Lues (acquirirter und hereditärer).
80 *Ueber Narkolepsie. L. Loewenfeld.
81 *Diagnosis and Treatment of Wandering Kidney. Batsch (Grossenhain).—Beitrag zur Diagnose und Therapie der Wanderniere.
82 *Beitrag zur Kenntniss der Roentgendermatitis. Wiesner (Aschaffenburg).
83 *Determination of the Functional Capacity of the Heart. G. Galli (Rome).—Ueber die Leistungsfähigkeit des Herzens. (Commenced in No. 23.)

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84 (No. 20.) Dermatitis follicularis et perifollicularis conglobata. L. Spitzer.
85 *Ueber Expectoration und expectorirende Mittel und Methoden. M. Saenger (Magdeburg). (Concluded from No. 19.)
86 Vegetarismus oder Fleischkost. F. Schilling (Leipsic).
87 (No. 21.) *Ueber die praktische Anwendung des Gaertner'schen Haemophotographen. R. Landesberg.
88 (No. 22.) Scleroma of Larynx. O. Frankenberger (Prague). Ueber das Sklerom des Kehlkopfes. (Concluded from No. 21.)
89 (No. 23.) *Einige Bemerkungen zur Pathogenese der Aortasclerose. L. R. v. Korczynski. (Concluded from No. 22.)
90 (No. 25.) *Zur Technik der Localanesthesie bei Extractionen von Ohrpolypen. H. Frey.
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92 Etiology of Paralysis of Muscles of Tongue, Palate, Larynx and Neck. L. Harmer.—Zur Aetiologie der Zungen-, Gaumen-, Kehlkopf- und Nackenmuskellähmung. (Commenced in No. 24.)
93 (No. 26.) Intoxication from Exalgin. O. Seifert (Würzburg).—Ueber Exalginvergiftung.
94 Zur Pathologie der Rhinolalia aperta. R. Coen.
95 *Extirpation of the Kidneys. L. Bornhaupt (Riga).—Ueber Nierenexstirpationen. (Commenced in No. 24.)

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96 (No. 24.) *Fracture of the Clavicle in Spontaneously Born Children. G. Riether (Vienna).—Clavicularfracturen Neugeborener bei spont. Geburt.
97 130 Operations for Urinary Calculi. D. Kokoris (Athens).—Erfahrungen über Blasensteinoperationen.
98 Large Basal Aneurism of Heart. V. Cominotti (Trieste).—Faustgrosses basales Herzaneurysma.
99 (No. 25.) *Diagnosis of Renal Infarct. R. Schmidt.—Zur Diagnostik des Niereninfarctes.
100 Substitution of Defect in Lid by Flap from Half the Thickness of the Ear. K. Büdinger.—Eine Methode des Ersatzes von Liddefecten.
101 Success of Thyroid Treatment in Endemic Cretinism. W. v. Jauregg.—Zur Behandlung des endemischen Cretinismus.
102 Lymph- and Hemangiomata of Larynx. L. Harmer.—Ueber Lymph- und Hämangiome des Kehlkopfes und entzündliche Vorgänge in denselben. (Concluded from No. 24.)
103 (No. 26.) Behavior of Red Corpuscles at High Temperatures. E. Wiener.—Ueber das Verhalten der rothen Blutkörperchen bei höheren Temperaturen.
104 Ueber 6 Fälle von Pityriasis lichenoides chronica. K. Kreibich.
105 Zur Frage der Vaccina generalisata vera. L. Merk.
106 (No. 27.) *Intravenous Infusion of Oxygen. G. Gärtner (Vienna).—Ueber intravenöse Sauerstoffinfusionen.
107 Ueber die Reaction des Prostatasecretes bei chron. Prostatitis. C. Pezzoli.
108 Ueber einige serodiagnostische Versuche. K. Kreibich.
109 *Ueber die Meningitis bei der Influenzaerkrankung. A. Ghon. (Concluded from No. 26.)

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110 *Contributo alla cura operativa del prolasso genitale. E. Pestalozzi.
111 *Instrument for Pelvic Measurements. L. Gigli.—Tentativi per giungere alla misurazione diretta e strumentale dei diametri interni antero-posteriori della pelvi.
112 *Note sulla vita e sulla vitalita dei nemaspermi. Roster.

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113 *Lateral Symphysiotomy. L. Gigli.—Taglio lateralizzato del pube.
114 Superiority of Ichthargan to Ichthyol in Gynecology. Angelini.—Di un succedaneo dell' ittiolo in ginecologia.

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115 De l'enseignement de la pathologie tropicale dans les universités de l'Europe. G. Treille. (Concluded from No. 5.)
116 Works of Bontius on Dysentery in Java. W. Ebstein (Gottingen).—Ueber die Mitteilungen von Jacob Bontius, betreffend die Dysenterie auf Java, 1630.

117 Bread in Therapeutics. M. Hofler (Bad Tolz).—Heilbrote. (Concluded from No. 4.)

2. **Smallpox in the Nineteenth Century.**—The epidemics of smallpox in the nineteenth century are studied by Newsholme. He remarks that the disease is unique in that the study of its epidemiology is more difficult than that of any other disease on account of vaccination, which has smoothed out the epidemic peaks in the curve of annual mortality, and caused its valleys to sink into insignificance or disappear. In this respect it is unlike the ideal diseases, measles and whooping cough, which have followed their own cycles in spite of all that human skill can do against them. There is some little evidence that inoculation in ante-vaccination times increased the incidence of smallpox without increasing its severity, but it is not quite clear that there was a great deal more smallpox in the latter part of the 18th century when inoculation was prevalent, than in the first part, and the exact amount of cases due to this cause are only to be surmised. He publishes diagrams giving the smallpox incidences in London and several other cities for periods of years, and concludes from a study of the diagrams and the history that the chief governing factor in the occurrence of smallpox is personal infection, and that the disease spreads from town to town and from one country to another, not always affecting these countries in the same year which might be expected, under similar climatic conditions, if they had any influence. There is, however, some further factor responsible for the causation of the greater epidemics and pandemics of smallpox, which for lack of a better term, he says, must still be designated by the old-fashioned name of "epidemic constitution." Without committing oneself to any theory, but simply stating that we may admit with older authorities that there is a *constitutio epidemica variolosa*, that is, that at certain irregular intervals smallpox, as judged by its wider spread, is more infectious than it is in other years with equal opportunities for its dissemination. There is no regular periodicity in these great epidemics, but there is a fairly regular periodicity for the minor epidemics, which has become disturbed and the intervals protracted in well-vaccinated communities. Whether smallpox belongs to the group including scarlet fever, diphtheria and rheumatic fever which have been shown to become epidemic chiefly in years with deficient rainfall, is open to doubt, but the matter deserves further investigation.

3. **Vaccination and Revaccination.**—Edwardes reviews the statistics of vaccination in England, Germany and elsewhere, showing that revaccination must be made universal and not optional if we wish to utilize the protective action to its full. It is the right and duty of the state to insist upon universal revaccination. Germany, Italy, Hungary, Roumania and Japan all have compulsory vaccination and other countries must follow.

6. **Vaccination and Its Complications.**—The variations and complications of vaccination are noticed by Fox, who remarks especially on the raspberry sore, the excessive local inflammation sometimes observed and the indefinite host of non-specific eruption which may occur in its course. All types are observed from the mild up to the gangrenous lesions, which are, however, rare. Gangrenous vaccinia may be the result of specific eruption due to infection by special organisms, but we know varicella may become gangrenous in scrofulous children, and the soil should be considered. The possibility of inoculation with syphilis, leprosy, etc., is largely ruled out in the use of glycerinated bovine virus. Tetanus may occur in rare instances, but is probably a secondary affection. The best method of protecting the local lesion is the application of several folds of sterilized lint containing no chemical disinfectant, held in position by strips of adhesive plaster. Outside of this boric lint may be placed, to be removed when it becomes at all moistened. With proper care the vagaries and mishaps of vaccination may be reduced to a minimum.

9. **Glycerinated Calf Lymph.**—Cope's paper describes the progress of normal vaccinia with glycerinated lymph and makes certain remarks in regard to the subject in general. He says that it should be recognized that the immunizing effect of vaccination appears to be much more rapidly destroyed during the first fifteen years of life than in any subsequent period of fifteen years. Therefore, the revaccination of children from 12 to 15 years of age may yield in many cases good vesicles while those of adults within 12 or 15 years of a successful primary vaccination will rarely reach more than the papular or very poor vesicular stage. While a primary vaccination may require repetition within ten or fifteen years, there is not the same urgency for a repetition after a successful revaccination. He calls attention to one or two features of some importance in revaccination: 1. The great tendency to edema of the distal part of the limb, which, however, readily subsides on change of position, but may be taken for cellulitis. There are apt to be some general symptoms, and he says that a person undergoing revaccination should take the same care of himself as if suffering from a bad cold. As a protective measure he advises the use of a saturated aqueous solution of picric acid painted over them and the surrounding skin wherever there has been any injury to the vesicles. He was led to try this from the observation of the same application after burns and scalds, and he has found it very useful. It is painless and he simply covers it with antiseptic wool, leaving it untouched for several days.

10. **Variola and Varicella.**—The differential diagnosis of variola and varicella is given by Wanklyn. He lays little stress on age. In his 200 cases observed, 16 per cent. were over 18 years of age. While the general symptoms, moderate pyrexia, nausea, malaise, aching in the head and limbs may occur in varicella, high temperature, sacral pain and vomiting are uncommon. In smallpox, also, there is a general prostration with muscular flaccidity. This phenomenon is absent in the primary fever in very few cases. This is more specially recognized in the facial muscles; the patient has a dull expressionless look with a settled aspect of fatigue and inattention. The rash should be observed in a good light, and a neglect of this may lead to error. Its distribution is of importance, the freedom of the hands and forearms in varicella, as compared with smallpox, is remarkable. He says it would be almost possible to make a diagnosis from the distribution of the lesions if the patient were exposed from the waist up. We can not exclude varicella if vesicles occur on the hands and feet, but it is the relative distribution that is to be noted. Another point is the lack of firm papules, the superficial nature of the lesions, the fineness and thinness of the covering membrane, and the irregular character of the lesions in a given space of the skin. In a late stage of either condition the diagnosis rests almost entirely on the distribution of scars and such scabs as remain. The diagnosis of smallpox is clinched if the evenly circular disc-like scabs are found, and the brown inspissated remains of pustules in the thick skin of the hands and feet. The differential diagnosis, however, between the two conditions rests not upon one single feature, but upon a certain consideration of all the evidence, care being taken to attach due weight to each point, especial importance being given to the depth of the skin upon which the lesions are placed, and above all the distribution of the rash.

11. **Patent Foods.**—Patent foods are defined by Hutchison as substances manufactured by artificial means from natural food products as substitutes for the ordinary natural foods, and usually sold by pharmacists. Their first rational use is from the power of stimulating appetite, and in this respect only do the extracts of beef need to be mentioned. As regards difficulty in swallowing there is no artificial food more difficult of swallowing than another, and none that is any richer in fat than ordinary butter. In view of compactness there are very few artificial foods which are superior to the natural ones. As regards digestibility there is little evidence in their favor. Considering the question of increasing any particular constituent of the diet the value of artificial foods may be urged, but it is sometimes hard to say what special inducements these possess. The claims for artificial foods are largely fallacious. As regards cheapness there is nothing to be said in their favor. They do not give the amount of energy that the natural substances do. He mentions a few easily-

digested foods that may be of advantage, such as somatose and certain preparations of casein, which he thinks are perhaps among the most useful of artificial foods. He goes over the various foods derived from animal and vegetable sources and remarks that many of them are practically useless. Cod liver oil is no better than ordinary cream or butter, and malted extracts are almost valueless as foods except for the sugar they contain, and there is no use giving them when we could give taffy. He speaks well for milk sugar or lactose, which is one of the best methods of enriching a diet in carbohydrates. Lactose does not taste specially sweet and is a food and can be added largely to liquid foods without making them unpleasantly sweet. It deserves a better place among sickroom requisites than it holds. Beef extracts are disposed of in rather short order. They contain so little proteid and so much extractive or mineral matter that they are not foods at all, but are true stimulants. The infant foods are given in a tabulated form. For most of them their great drawback is their cost, and that they contain too little fat.

12. **Phthisis; Its Cause and Prevention.**—The great reduction in the mortality that has taken place from this disease is noticed by Bramwell, who remarks that it has been chiefly due to better sanitary measures rather than to preventive measures especially directed against phthisis. We should also remember that the prevention of phthisis and other forms of tuberculosis will be slow and gradual unless we can get some more effectual method than is now known, such as inoculation. We must, therefore, not be disappointed if the results are less brilliant than some enthusiasts in the crusade against phthisis seem to anticipate. The great danger is the human sputum, which, however, seems to lose its activity under the influence of fresh air and sunlight, while there is reason to believe that when the conditions are favorable to its existence it may be virulent for a long time. The carrying of the tubercle bacilli into the system by other routes than by the sputum is comparatively unimportant. The infection from cattle and milk is also mentioned. It is not to be assumed that every case of tuberculosis of the mesenteric glands or gastrointestinal tract is due to tuberculous milk or food. It is just as possible that it may be introduced through inhalation and swallowing, though in children this may be a comparatively frequent cause. There is little probability of much human tuberculosis being due to tuberculous meats as shown by the facts that the reduction of tuberculous disease is greatest in the period of 15 to 45, when the highest amount of meat is eaten, and the decrease of tuberculosis has been coexistent with a great increase in meat consumption. He hopes Prof. Koch's observations and views may be substantiated as, if true, they would greatly facilitate the prevention of phthisis and other forms of tuberculous disease.

22. **Parapsoriasis.**—Brocq classifies three varieties of what he calls parapsoriasis, that is, cutaneous affections which are evidently a transition between psoriasis, the seborrhoids and lichen planus. Some of them have been partially described by Unna as parakeratosis variegata, by Jadassohn under the terms lichenoid and psoriasiform exanthem, by Juliusberg as chronic lichenoid pityriasis and by Radcliffe Crocker as lichen variegatus. They are characterized by long duration, slight influence on the general health and very little, if any, pruritus. The process is a superficial redness with more or less pronounced pityriasic desquamation. Still another characteristic of the group is their extraordinary resistance to local measures. He calls the first variety parapsoriasis in drops; the second, lichenoid parapsoriasis, and the third, parapsoriasis in patches.

24. **Study of Alopecia Areata.**—Moty describes epidemics of alopecia areata occurring among the troops. His experience establishes the probability of contact contagion in the etiology, of the acceleration of the cure by antiseptic measures and that the affection may persist in a latent form, to recur again sooner or later. But at the same time he noted that in persons with restricted visual field, the alopecia was peculiarly obstinate, its tenacity proportional to the degree of restriction of the field. He also noted that the alopecia in nervous subjects seemed to be of an extremely rebellious nature, and did not exhibit positive infectious characteristics.

36. **The Diuresis Treatment of Chronic Biliary Infections.**—When there is hyperfunction on the part of the liver, or a chronic angiocholosis has a tendency to become obliterating, alkalines, on account of their stimulating action on the liver cells, are distinctly contraindicated. They are also liable to entail gastric disturbances. But on the other hand the copious use of water has a remarkably favorable effect on biliary derangements and a course of water drinking has cured many apparently inveterate cases of chronic biliary infections in Cottet's experience at Evian, where there are very mild mineral springs. Among the typical examples he cites is that of a patient with hypertrophic biliary cirrhosis. Under the influence of the copious diuresis the pronounced icterus became much attenuated, the fever nearly disappeared, the previous alimentary glycosuria vanished, and in spite of the loss of a few pounds in weight, the general health and strength were remarkably benefited. Some of the patients drank as much as 2.5 to 3 liters during the morning. It is best taken progressively and on an empty stomach. The amount of urine voided within two hours sometimes amounted to as much as the total water ingested. This "diuresis treatment" enables many to tolerate milk who otherwise are unable to take it.

40. **Massage and Mobilization in Phlebitis.**—Marchais advocates massage as the chosen treatment of phlebitis after the immobilization necessary during the fever and for twelve days after defervescence. The joints of the toes, foot and ankle should then be gradually mobilized, without assistance or resistance on the part of the patient. After four days he can make these movements himself and exercise the muscles of the limb. Massage should then be applied, consisting exclusively of light *effleurage* of the foot, leg and outer portion of the thigh. After a week of this, the knee and muscles can be massaged very gently, avoiding the veins, especially in the region of the external saphena, hollow of the knee, triangle of Scarpa, etc. By the end of the second week, the patient can sit up and be raised to his feet. By the twentieth day he can take a few steps, leaning on an attendant rather than on a crutch or cane which favors vicious attitudes. The edema that is liable to appear will subside spontaneously and does not require compression. It is better to leave the muscles free. These rules for the treatment of phlebitis are based on anatomic study of the processes in phlebitis which Marchais outlines in detail.

46. **High Frequency Currents in Dermatology.**—Régnier affirms that this method of treatment has established its usefulness in a certain number of cutaneous affections. The physician should not hesitate to prescribe or apply it himself if he is versed in the technic. High frequency currents have a soothing effect on the nerves while they stimulate the circulation. They do not induce contraction or sensation in the nerves, but diminish their sensitiveness almost to anesthesia. General or localized pruritus usually yields to the application of the high frequency current. The rare cases in which it fails are less numerous the stronger the current. The results attained by various physicians in cases of psoriasis have been conflicting, Oudin considering it the best of all methods while some others have derived no benefit from it. It has been more constantly successful in eczema, especially in the variety with exudation. It is possible to cure erythematous lupus with it. All the observations published coincide in the rapidity and permanency of the cure, even surpassing those obtained by phototherapy. Other cutaneous affections that have been favorably influenced are alopecia areata, zona, acne, impetigo and molluscum contagiosum, as also localized scleroderma. The action of the high frequency current in tuberculous lupus is still disputed. Some cases have been improved or cured and others not. Régnier suggests that it might be advantageously combined with phototherapy and radiotherapy, supplementing the chemical action of the rays with the thermic and electric effects and the ozone of the high frequency current.

51. **Experimental Research on Vaccination Against Septicemia.**—Phisalix reports the results of tests on 1250

young dogs during the year terminating May 15. Most of the tests were made at Paris, but others were carried on under his directions in other countries in Europe and in Algeria. The mortality of the control animals was 25 to 80 per cent., while that of the vaccinated animals was only 2.88 per cent. Only 6 dogs died out of 40 that were already affected at the time of the vaccination. The immunity conferred by it lasts long enough for the dogs to outgrow their special youthful susceptibility. His technic was described in detail at the meeting of the Paris Académie des Sciences, April 7, 1901.

52. **Treatment of Gonorrheal Rheumatism.**—Gûepin formulates the rules as follows: 1. Abolish the stagnation of the products of the infected glands both in the glands and in the urethra. Digital compression should aid the spontaneous evacuation that follows relief of the stricture. Digital compression of the prostate is a happy adjuvant of indirect treatment in all forms of prostatitis. Toxi-infectious accidents must be suitably treated. The joint affected requires merely soothing, revulsive measures and repose without complete immobilization in cases of simple arthralgia, with puncture if there is hydrarthrosis. But if the fluid is turbid and there are indications of acute arthritis, early and extensive arthrotomy should be applied, followed by drainage and brief, comparative immobilization. If the articular lesion is of long-standing the usual measures are indicated, but the main point in treating gonorrheal rheumatism is to remove the general cause.

66. **Treatment of Papillomata in the Urethra.**—Karvonen found that it was possible to crush small papillomata in the accessible portion of the urethra, by introducing a thick Beniqué sound and massaging the tissues over it, applying some force where the growths could be palpated. The hemorrhage was rapidly arrested with instillation of a 2 or 3 per cent. solution of nitrate of silver. They do not recur after this treatment as the roots and blood vessels are crushed also, thus avoiding the hard infiltration that follows their removal by other means. Any peculiarly resistant papillomata can be readily extirpated by the usual methods.

75. **Curative Action of Serum a Cell Activity.**—Von Niessen considers the serum an organized plasmatic substance, a cell product with power to become regenerated into cellular being. The serum is a fluid, living cell plasm. This conception of the serum explains many processes in pathology and in serotherapy, as he reviews in detail. He regards the treatment of lupus with tuberculin and similar measures in "immunization-therapy" with living cultures of the bacilli or their derivates, as an over-compensation such as frequently occurs in nature. He describes syphilis as the type of the many-sidedness and persistence of a chronically recurring infectious process and also as the most instructive of all examples for the study of immunity in general. A syphilitic subject becomes relatively immune in the course of the struggle between his organism and the saturation with the infection, and yet he is and remains all his life infected. Although syphilis, leprosy and sepsis saturate the organism with infection, yet the causal agent is only slightly toxic, and some local infectious process may confer a higher degree of immunity of the entire organism than these constitutional diseases. A convalescent from typhoid fever is usually immune for eight years to new infection, while a syphilitic in the tertiary stage may be relatively immune to new infection and yet retain the causal agent of syphilis alive and capable of reproduction in some deposit somewhere in his body. The serum absorbs the disease germ from the primary lesion, the blood cells and tissues take up these germs and deliver them again to the serum in an altered form, and the serum gradually adapts itself to conquer the special species involved. It is effectively aided by other factors, chief among which is the vasomotor central nervous system. The power of assimilation is supplemented by accommodation to deleterious chemical influences and the result is "the acquirement of the knack, Immunity." ("Abrichtung, Immunität.")

80. **Narcolepsy.**—Loewenfeld has recently had a case under treatment which was a counterpart of the classic case described by Gélineau in 1880, and for which he appropriated the term narcolepsy to designate a morbid entity characterized not only by sudden and frequent irresistible desires to sleep but also by inhibition of the muscular action necessary to hold the body erect. This extensive motor inhibition is evidently caused by the same pathologic cause that induces the desire to sleep. This cause can scarcely be a gross change in the structure of the nervous system, and the affection therefore should rank as a neurosis. It is obstinate and in Gélineau's case was apparently incurable, but Loewenfeld succeeded in practically curing his patient by suggestion in hypnosis and direct hydrotherapy and galvanization of the head. He has recently cured a case of severe neurasthenic sleepiness by similar measures.

81. **Diagnosis and Treatment of Wandering Kidney.**—Batsch asserts that it is not always necessary to fasten the liver in its normal position. The desired aim is attained if it is fastened in such a way as to relieve the pressure and cause no disturbances by resting on other organs or stretching vessels and nerves. He relates two cases to demonstrate that the removal of half of the capsule proper only transiently influences the functions of the kidney, and that Edebohl's method of fastening the kidney is the securest mode of nephropexy. If a fistula should happen to develop, it is easily conquered.

82. **Roentgen Dermatitis.**—Wiesner has witnessed a case of laboratory *x*-ray dermatitis which ran the usual protracted, rebellious course. The patient is a healthy young man engaged in the manufacture of Roentgen tubes for years. He has been constantly exposing himself to the *x*-rays, but never experienced any ill effects and considered himself immune to their action. There was a round, intact patch in the center of the extensive and intense Roentgen ulceration. This with other features of the case can be explained only by a trophoneurotic origin. The *x*-rays penetrate into the skin and cause some chemical alteration in the molecules surrounding or in the nerve terminals. This irritates the nerve and by reflex action induces the trophoneurotic disturbance. The alterations in the skin are secondary. This hypothesis explains the protracted incubation in many cases and the universally-recognized intractability of the lesion.

83. **Diagnostic Importance of the Divided Heart Sound.**—The divided heart sound is generally considered a physiologic phenomena except in its pronounced form, but Galli has established by extensive research on 300 individuals, that it is always and inevitably a pathologic phenomenon, differing only in degree. It always indicates insufficiency of the heart, and is therefore a reliable criterion of the functional capacity of the heart organ. It appears long before any other symptoms and at first indicates merely fatigue of the heart muscle. Rest and recuperation banish it in the milder forms and benefit it in all. He found in examining a large number of soldiers that the pulmonic second sound was divided in the morning in about 19 per cent.; in the afternoon about 40 per cent., and in the evening 58 per cent., on an average were affected, thus demonstrating the influence of fatigue in its production. It was invariably present in convalescence from infectious diseases, in chlorosis, anemia, etc., and disappeared by degrees as the patients recovered. At first it was marked at all times of the day, then it was only apparent in the afternoon and evening, then in the evening and after this, only subsequent to unusual exertion or emotions, finally vanishing completely. The divided heart sound can be accepted as a guide in the treatment of tuberculosis and in other affections. When it appears it is a sign that the patient requires repose or nourishment or both. Even in apparent health the reduplication of the second sound is a warning of fatigue on the part of the heart and of impending or established insufficiency. He always has the subject recline for auscultation and listens in the second interspace about an inch from the sternum, or in the third space close to the latter. It is important to distinguish between the pathology of the right and left heart, and between the reduplication of the right or left ventricle. Repose is the best means to abolish the divided sound and thus avert insufficiency of the heart. It is especially important in convalescence from infectious diseases, and lack of the needed rest—from

ignorance of the warning sign—is possibly the explanation of many hitherto inexplicable sudden deaths after pneumonia, measles, etc. The reduplication may be due to disease of the heart muscle, to abnormally high blood pressure in the blood vessels in the lungs or in the aorta, to modifications in the traction of the lungs or to nervous causes or to combinations of several of these factors.

85. **Expectorants.**—Saenger asserts that tenacious sputa can be dislodged only by vigorous coughing, laughing or sneezing. A feeble cough is absolutely ineffectual. He finds it necessary sometimes to induce vigorous coughing by mechanical means, injecting salt solution or a solution of menthol into the larynx. The administration of narcotics is irrational and harmful in the treatment of most cases of bronchitis. They are only indicated in cases of hemoptysis. Whistling, playing on wind instruments and singing also have a favorable effect on expectoration. Loose masses of secretions are moved along from the lower into the upper portions of the bronchial tree and can then be better evacuated by coughing and hawking. Among the various expectorants he has found that hydrastinum muriaticum has a surprisingly powerful effect in loosening tenacious masses and favoring their expectoration in chronic bronchitis. It is a stable drug and he recommends it urgently for such cases. He prescribes for adults ten to twenty drops of a mixture of 1 gm. hydrastini mur. in 19 gm. water, three or four times a day.

Practical Application of Gaertner's Hemophotograph.—THE JOURNAL described this little apparatus in the issue for January 18, 1902, p. 211. Landesberg has been testing it in the clinic and has found it extremely useful and a valuable acquisition to the diagnostic equipment. It is inexpensive, simple and reliable. Comparative tests with other hemamometers gave the identical results in each in more than half of the tests, and in the others the differences were no greater than between Fleischl's and Gowers' instruments.

89. **Pathogenesis of Sclerosis of the Aorta.**—Korczynski believes that localized sclerosis and aneurism of the first portion of the aorta are in many cases the direct result of some past inflammation. There is every reason to suppose that the aorta may be affected with acute or subacute processes the same as the endocardium, and that they may be followed by the development of a chronic process.

90. **Local Anesthesia in Removal of Polypi.**—Cocain has little action on bleeding, inflamed and granulating surfaces and frequently fails in the removal of large polypous growths as it is only superficially applied. Frey obviates this inconvenience and ensures complete anesthesia by injecting the solution of cocain directly into the tumor itself, pushing the needle down to the roots and thoroughly impregnating the polyp with the fluid as it is withdrawn. He has followed this technic in ten cases with gratifying results.

91. **Therapeutic Application of Continuous Heat.**—Ullmann describes a hydrothermo-regulator and various appliances which render possible the application of moist heat at a constant temperature for any desired length of time. He recommends this method of treatment in the highest terms on account of its efficacy, promptness, harmlessness and the freedom from pain or inconvenience, especially for persons in bed. The appliances are adapted for the application of the heat to any part of the body both for man and in veterinary practice. The hydrothermo-regulator is supplied with a few quarts of water and by a mechanical contrivance forces the water through the coils of pipe which form the "thermodes" for local application, and aspirates it again, so that a constant stream is pouring through the pipes and through the regulator in an endless circle. The heat is supplied by a gas jet. The thermodes are made of sheet lead or rubber with the tubes coiled to fit the parts. For application in the rectum or vagina the two-way pipe is inserted straight or a rubber bag fits over it like a colpeurynter. Flexible lead tubes are provided to roll around a finger, forearm, etc., and even suspensories with double walls are on the list. A wet cloth or other substance is placed between the coil and the skin. Ullmann cites numerous examples out of his extensive experience to demonstrate the remarkable benefit to be derived in local venereal and other affections, both acute and torpid, and in inflammation of the adnexa, etc.

95. **Extirpation of the Kidney.**—Bornhaupt reports the remote results in twenty-one cases in which von Bergmann removed the kidney. Twelve of the patients have been permanently cured, among them one woman whose kidney was ablated on account of tuberculosis. She is still in perfect health and has passed through a pregnancy since the nephrectomy. One patient has had no recurrence of a sarcoma for five years since the nephrectomy on this account. In two cases symptoms of intestinal obstruction masked the renal lesion. They were caused by adhesions in the omentum, the result of hydronephrosis which had developed without typical symptoms, the presumptive diagnosis being an abdominal cyst. There was no hematuria in one case of extensive sarcoma which required nephrectomy. When the other kidney was in good condition the patients rapidly recovered from the operation and voided 600 to 800 c.c. urine in the first twenty-four hours. One patient voided as much as 3000 c.c. by the fifth day. Only three deaths occurred soon after the intervention and they were explained by unsuspected lesions in the stomach or elsewhere. Three patients have died since, and two were not improved by the operation.

96. **Fracture of the Clavicle in Spontaneously Born Infants.**—Riether proclaims that fracture of the clavicle is by no means an uncommon occurrence in the experience of the best-trained midwives exercising great care in aiding spontaneous delivery. He is chief of the Foundlings' Home at Vienna and has observed no less than 65 cases during the last year. They came from two official maternities or from the imperial training school for midwives. Such a fracture attracts no attention and is not discovered unless sought for. After the matter had been discussed, one of the midwives exclaimed that she heard a distinct crack as the shoulder was passing the symphysis, and investigation disclosed a fresh fracture of the clavicle on that side. If the child moves the arm differently from its fellow, a fracture should be suspected even if none can be discovered on palpation. The fragments may have resumed normal position, and later investigation after the manipulations of dressings, etc., may reveal the trouble. Riether has found that the most effective treatment is a supporting bandage after the skin has been well smeared with a vaselin, lanolin and zinc oxid paste to protect it as much as possible. A small wedge-shaped pad in the axilla will immobilize the shoulder.

99. **Diagnosis of Renal Infarct.**—Schmidt lists the following symptoms as indicative of renal infarct as he has observed them in the clinic and recently on a patient, 45 years old, who had long suffered from mitral insufficiency and stenosis of the left arterio-venous ostium. Embolism in the domain of the renal arteries may induce acute bladder disturbances, either retention or incontinence of urine, followed later by polyuria. The latter is probably due to a nervous vasoparalysis, the result of active hyperemia around the necrosed focus. Hematuria is rare, but a frequent symptom is a rapidly developing, transient serum and nuclear albuminuria. The pain is increased by reclining on the side less affected in case of bilateral painful renal infarcts. The first symptom of a renal infarct in a person with heart disease is liable to be sudden vomiting. Higher temperature may be the result of reabsorption of necrosed particles of tissue, and is thus aseptic. On suspicion of renal infarct, the sensibility of the ileohypogastric nerve should be investigated.

106. **Intravenous Infusion of Oxygen.**—When air or a gas is infused into the veins of a dog, death rapidly follows from gaseous embolism, but Gaertner has discovered that this familiar fact does not apply to intravenous infusion of oxygen. He found that he could gradually infuse even a large amount of oxygen into the external jugular vein without disturbance. The pulse and respiration were not affected, and the oxygen was absorbed so rapidly that none of it reached the left heart. He describes his experiences with nine dogs, all under the influence of morphin. The tests were modified in various ways,

but the results were invariably the same, except when the animals had been previously intoxicated with a more than fatal dose of carbon dioxid. Even in this latter case the pulse and respiration were restored temporarily to normal after infusion of the oxygen. The only apparent effect caused by the infusion of oxygen in dogs was a gurgling sound during the movements of the heart. He learned to distinguish the tolerated dose of oxygen by listening to this sound. When it was audible only at twenty inches' distance there was no danger, but if it could be heard farther than this the dose of oxygen was too large. Temporary suspension of the infusion banished the sound and also all danger for the animal. He gives the pulse tracings to demonstrate the absolute harmlessness of the infusion. The right heart was always bright red. This was due in part to the presence of minute bubbles of the gas as well as to the oxygenation. These bubbles did not cause the slightest disturbance in the circulation in the lungs, probably because the oxygen was absorbed too rapidly. The churning of the oxygen in the blood by the heart action suggestively reproduces the familiar laboratory method of eliminating carbon dioxid from blood by shaking it after adding oxygen.

109. **Meningitis in Influenza.**—About 27 cases are on record of "brain influenza," but Ghon finds that only 12 are flawless on analysis, including two cases personally observed. In 7 pure cultures of the influenza bacillus were derived; the others were cases of mixed infection. Eight of the patients were children. In one case each there was concomitant inflammation of the frontal sinus, pneumonia, otitis or laryngitis. Langer's case of severe pure infection recovered.

110. **Operative Treatment of Genital Prolapse.**—Pestalozzi states that the vesico-vaginal septum contains in the center a strip of loose connective tissue. This tissue stretches easily, and cystocele is merely the result of excessive stretching of this portion of the vesico-cervico-vaginal wall. Attempts at repair are sure to fail unless this inner interstitial tissue can be restored to normal shape and size. This can be done through a longitudinal incision on the median line of the anterior wall of the vagina. The fingers can then be worked into the loose tissue of the "interstitial wall" until the denser tissues of the encircling muscles are reached. When the lateral limits of the connective tissue are thus determined, it is easy to draw the edges together on the median line and thus shorten this portion of the vesico-vaginal septum. The denser tissues are then drawn over the suture to strengthen it, and the condition is thus permanently remedied. He applies this same principle to the treatment of all kinds of genital prolapse, and states that no other method ensures such perfect and permanent cures.

111. **Instrument for Pelvic Measurements.**—Gigli describes his instrument as two sounds, terminating each in a small ball, and appropriately curved to fit into the vagina and the urethra. Each sound is inserted separately. The one in the vagina is introduced until it rests against the promontory, the one in the urethra until it rests against the pubis. The handles of each fit into a graduated adjustable scale, which links them together. The figure marked on the scale is noted. The sounds are then removed and fitted together again outside as marked on the scale. The distance between their tips is the conjugate diameter.

112. **Life and Vitality of the Spermatozoa.**—Roster states that the irritation produced by the presence of the spermatozoa in the cervical canal or some other cause induces an immigration of polynuclear leucocytes which destroy most of them by phagocytosis. He describes a stain which determines whether the spermatozoa are living or dead at the time of examination.

113. **Lateral Symphysiotomy.**—Gigli advances arguments to prove that symphysiotomy as usually practiced, and even with Zweifel's recent improvement of drainage outside of the vulva, is a comparatively dangerous operation. The field is always one of potential infection and the tissues of an articulation are infinitely more sensitive than other tissues elsewhere. He therefore proposes and has performed the operation on a patient with brilliant success, to saw the pubic bone on one side of the joint. The operation is very simple and reduces remarkably the chances of infection, while the precision and certainty of the technic is surprising and opens a new horizon for symphysiotomy thus modified. He divides the bone from beneath with his famous wire saw after incision of the soft parts. The pelvis opens, when this is done, like a book whose clasp has been unfastened. The hemorrhage is entirely venous and slight. The incision is carried from the spine of the pubis obliquely downward to the point where terminates the ligamentum arcuatum superius. It is not necessary to expose the bone completely. The upper edge between the two recti is opened up and a strong needle is inserted beneath the bone and passed downward, guided by the finger in the vagina, until the tip emerges at the lower angle of the incision in the soft parts. A thread is then passed through the eye of the needle and the wire saw is drawn through beneath the bone by this means. The incision is entirely outside of the genital sphere, and there are no vessels that require ligating.

Books Received.

Acknowledgment of all books received will be made in this column, and this will be deemed by us a full equivalent to those sending them. A selection from these volumes will be made for review, as dictated by their merits, or in the interests of our readers.

VAUGHAN AND NOVY ON CELLULAR TOXINS. A Treatise on Cellular Toxins, or the Chemical Factors in the Causation of Disease. By Victor C. Vaughan, Ph.D., M.D., Professor of Hygiene and Physiological Chemistry, and Frederick G. Novy, M.D., Junior Professor of Hygiene and Physiological Chemistry in the University of Michigan. New (4th) Edition, Revised and Enlarged. In One 8vo Volume of 480 Pages, with 6 Illustrations. Cloth. Price, $3.00 net. Philadelphia and New York: Lea Brothers & Co. 1902.

EMERGENCY REPORT ON SURRA. By D. E. Salmon, D.V.M., Chief of the Bureau of Animal Industry, and Ch. Wardell Stiles, Ph.D., Pathologist of Bureau of Animal Industry. With a Bibliography of Surra and Allied Trypanosomatic Diseases by Albert Hassall, M.R.C.V.S., Acting Assistant Zoologist of Bureau of Animal Industry. Paper. Pp. 152. Washington: Government Printing Office. 1902.

PHOTOGRAPHIC ATLAS OF THE DISEASES OF THE SKIN. A Series of Eighty Plates, Comprising More Than One Hundred Illustrations with Descriptive Text, and a Treatise on Cutaneous Therapeutics. By George Henry Fox, A.M., M.D., Clinical Professor of Diseases of the Skin, College of Physicians and Surgeons, N. Y. Part XIII. Philadelphia and London: J. B. Lippincott Co. 1901.

THE CHEMISTRY OF THE TERPENES. By F. Heusler, Ph.D., Privatdocent of Chemistry in the University of Bonn. Authorized Translation by Francis J. Pond, M.A., Ph.D., Assistant Professor in the Pennsylvania State College. Carefully Revised, Enlarged and Corrected. Cloth. Pp. 457. Price, $4.00 net. Philadelphia: P. Blakiston's Son & Co. 1902.

DANGEROUS TRADES. The Historical, Social, and Legal Aspects of Industrial Occupations as Affecting Health, by a Number of Experts. Edited by Thomas Oliver, M.A., M.D., F.R.C.P., Professor of Physiology, University of Durham. With Illustrations. Cloth. Pp. 891. Price, $8.00. New York: E. P. Dutton & Co. London: John Murray. 1902.

THE ESSENTIALS OF HISTOLOGY: Descriptive and Practical, for the Use of Students. By E. A. Schaefer, LL.D., F.R.S., Professor of Physiology in the University of Edinburgh. Sixth Edition, Revised and Enlarged, with 463 Illustrations. Cloth. Pp. 416. Price, $3.00. Philadelphia and New York: Lea Bros. & Co. 1902.

MEDICAL AND SURGICAL REPORT OF THE PRESBYTERIAN HOSPITAL IN THE CITY OF NEW YORK. Volume V. January, 1902. Pasteboard. Pp. 278. Edited by Andrew J. McCosh, M.D., and W. Gilman Thompson, M.D. New York: Trow Directory Printing and Bookbinding Co.

QUIZ COMPENDS. COMPEND OF SPECIAL PATHOLOGY. By Alfred E. Thayer, M.D., Assistant Instructor in Gross Pathology, Cornell Medical College. Containing 34 Illustrations. Cloth. Pp. 322. Price, $0.80. Philadelphia: P. Blakiston's Son & Co. 1902.

CONTRIBICION AL ESTUDIO DE LAS DEFORMACIONES PELVICAS EN MESICO POR EL Dr. J. Duque de Estrada, M.D.A., Jefe de Clinica de Obstetricia. Paper. Pp. 67. Mexico: La Europea Press. 1902.

INDEX-CATALOGUE OF MEDICAL AND VETERINARY ZOOLOGY. Part I. By Ch. Wardell Stiles, Ph.D., and Albert Hassall, M.R.C.V.S. Paper. Pp. 46. Washington: Government Printing Office. 1902.

INDSTILLING FRA BERI-BERI KOMITEEN. Paper. Pp. 153. Kristiania: Marius Stamnes' Bogtrykkeri. 1902.

The Public Service.

Army Changes.

Movements of Army Medical Officers under orders from the Adjutant-General's Office, Washington, D. C., July 2 to 9, 1902, inclusive:

Henry P. Birmingham, major and surgeon, U. S. A., member of a board convened at Fort Leavenworth, Kan., to examine officers of the Army for promotion.

William C. Borden, major and surgeon, U. S. A., leave of absence for one month and thirteen days granted.

James Carroll, contract surgeon, to accompany Major Jefferson R. Kean, surgeon, U. S. A., to Camp Thomas, Ga., for the purpose of making a sanitary inspection of the camp.

William D. Crosby, major and surgeon, U. S. A., from Fort McPherson, Ga., to duty at Camp Thomas, Ga.

Charles M. Drake, major and surgeon, Vols., leave of absence for one month granted with permission to apply for an extension of one month.

William W. Gray, major and surgeon, U. S. A., leave of absence for one month and fifteen days granted, to take effect about July 15, 1902.

James B. Hallwood, contract surgeon, member of a board convened at Fort Leavenworth, Kan., to examine officers of the Army for promotion.

Wallace E. Parkman, contract surgeon, from the Department of California to the Department of the Columbia for assignment to duty in Alaska.

Jefferson R. Kean, major and surgeon, U. S. A., to proceed to Chickamauga Park, Ga., for the purpose of making a sanitary inspection of Camp Thomas. Major Kean will make such suggestions and recommendations to the commanding officer of the camp and to the medical officers on duty thereat as may seem in the best interests of the service to maintain the health of the troops and eradicate epidemic disease.

Robert C. Rogers, contract surgeon, relieved from further duty in the Division of the Philippines and assigned to duty at Fort Clark, Tex.

Frank E. Thompson, contract surgeon, now at Fort Niagara, N. Y., is relieved from further duty in the Division of the Philippines and assigned to duty at Fort Niagara.

Charles W. Thorp, contract surgeon, from duty at Fort Clark, Tex., when relieved by Contract Surgeon R. C. Rogers, to proceed to his home in Denver, Colo., for annulment of contract.

Hugo A. Wahl, contract surgeon, so much of former orders as directs him on his arrival at San Francisco, Cal., to report to the Surgeon-General by letter for annulment of contract is amended so as to assign him to duty in the Department of California.

Robert S. Woodson, captain and asst.-surgeon, U. S. A., leave of absence for two months granted, with permission to apply for an extension of one month.

Navy Changes.

Changes in the Medical Corps of the Navy for the week ending July 12, 1902:

Asst.-Surgeon W. Seaman, ordered to the Naval Hospital, Yokohama, for temporary duty, from Naval Station, Guam.

Surgeon N. H. Drake, detached from the *Philadelphia* and ordered to the Mare Island Navy Yard.

Surgeon P. A. Lovering, detached from the Navy Yard, Mare Island, and ordered to the Asiatic Station, for duty at the Naval Hospital, Cavite, P. I.

Surgeon J. E. Gardner, detached from the Naval Hospital, Cavite, and ordered to report to the commander-in-chief, Asiatic Station, for duty.

P. A. Surgeon J. E. Page, ordered to report at the New York Navy Yard for duty with recruiting party to leave that yard July 15.

P. A. Surgeon C. A. Crawford, detached from the Naval Hospital, Boston, Mass., and ordered to report at the New York Navy Yard for duty with a recruiting party to leave that yard July 12.

P. A. Surgeon F. M. Furlong, detached from the Naval Hospital, Norfolk, and ordered to report at the New York Navy Yard for duty with a recruiting party to leave that yard July 12.

Asst.-Surgeon R. W. Plummer, ordered to the Naval Hospital, Chelsea, Mass.

Surgeon W. F. Arnold, detached from the Naval Hospital, Yokohama, Japan, and ordered to the Marine Brigade.

Marine-Hospital Changes.

Official list of the changes of station and duties of commissioned and non-commissioned officers of the public health and Marine-Hospital Service, for the fourteen days ended July 10, 1902:

Surgeon, J. H. White, to proceed to Baltimore to inspect the quarantine steamer *Neptune*.

Surgeon L. L. Williams, detailed as a member of a Revenue Cutter Service retiring board.

Surgeon R. M. Woodward, detailed as a member of a Revenue Cutter Service retiring board.

P. A. Surgeon J. B. Stoner, to proceed to Berlin, Md., as inspector.

P. A. Surgeon J. A. Nydegger, granted leave of absence for three days from July 7.

Asst.-Surgeon L. L. Lumsden, granted five days' extension of leave of absence from July 12.

Asst.-Surgeon T. D. Berry, granted leave of absence for one month from July 17, 1902, on account of sickness.

A. A. Surgeon A. D. Foster, granted extension of leave of absence for seven days from May 31.

A. A. Surgeon S. A. Ransom, granted leave of absence for seven days under paragraph 181 of the regulations.

A. A. Surgeon C. B. Sweeting granted leave of absence for one month from July 1, 1902, on account of sickness.

Senior Pharmacist S. W. Richardson, detailed for special temporary duty at Washington, D. C.

Senior Pharmacist C. G. Carlton, on being relieved by Junior Pharmacist F. Siedenburg, to proceed to Chicago, and report to medical officer in command for duty and assignment to quarters.

Senior Pharmacist F. R. Troxler, seven days' leave of absence granted, under paragraph 201 of the regulations, amended so that said leave shall be for six days only.

Junior Pharmacist W. C. Phillips, granted leave of absence for twenty-five days from July 1.

Junior Pharmacist Frank Siedenburg, relieved from duty at Chicago, and directed to proceed to New Orleans and report to medical officer in command for duty and assignment to quarters, relieving Senior Pharmacist C. G. Carlton.

BOARDS CONVENED.

Board convened at Washington, D. C., June 30, 1902, for the physical examination of an officer of the Revenue Cutter Service. Detail for the Board: Surgeon L. L. Williams, chairman; Surgeon R. M. Woodward, recorder.

Board convened at Washington, D. C., for the physical examination of applicants for position in the Coast and Geodetic Survey. Detail for the Board: Surgeon L. L. Williams, chairman; Surgeon R. M. Woodward, recorder.

Board convened at New York, July 10, 1902, for the physical examination of an officer of the Revenue Cutter Service. Detail for the Board: Surgeon G. W. Stoner, chairman; P. A. Surgeon T. Clark, recorder.

Board convened to meet at San Francisco, July 14, 1902, for the physical examination of applicants for position of second assistant-engineer, Revenue Cutter Service. Detail for the Board: P. A. Surgeon W. G. Stimpson, chairman; P. A. Surgeon H. S. Cumming, recorder.

PROMOTION.

Junior Pharmacist F. A. Southard promoted to be senior pharmacist from July 1, 1902.

APPOINTMENT.

J. C. Elfers, of Wisconsin, appointed to be acting assistant surgeon for duty at Sheboygan, Wis., June 30, 1902.

Health Reports.

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon-General, Public Health and Marine-Hospital Service, during the week ended July 12, 1902:

SMALLPOX—UNITED STATES.

California: San Francisco, June 22-29, 3 cases; Stockton, June 1-30, 14 cases.
Georgia: Augusta, June 1-30, 1 death.
Indiana: Evansville, June 28-July 5, 2 cases.
Kansas: Wichita, June 28-July 5, 2 cases.
Kentucky: Covington, June 28-July 5, 5 cases.
Maryland: Cumberland, June 1-30, 2 cases.
Massachusetts: June 28-July 5, Boston, 6 cases; Cambridge, 6 cases, 2 deaths; Melrose, 1 death; Somerville, 2 cases.
Michigan: Detroit, June 28-July 5, 3 cases.
Minnesota: Minneapolis, May 17-July 5, 17 cases.
Missouri: St. Louis, June 30-July 6, 7 cases.
Nebraska: Omaha, June 28-July 5, 3 cases.
New Hampshire: Nashua, June 28-July 5, 1 case.
New Jersey: Camden, June 28-July 5, 1 case; Elizabeth, March 29-June 21, 24 cases, 3 deaths; Hudson County, Jersey City included, June 22-July 6, 30 cases, 8 deaths; Newark, June 28-July 5, 10 cases, 5 deaths.
New York: New York, June 28-July 5, 26 cases, 11 deaths.
North Carolina: Beaufort (vicinity of), May 15-July 4, 9 cases.
Ohio: Cincinnati, June 27-July 4, 7 cases; Cleveland, June 28-July 5, 27 cases, 6 deaths; Dayton, June 28-July 5, 2 cases; Youngstown, June 21-28, 1 case.
Oregon: Portland, July 1, 26 cases.
Pennsylvania: June 28-July 5, Erie, 2 cases; Johnstown, 8 cases; McKeesport, 3 cases; Philadelphia, 7 cases, 2 deaths; Pittsburg, 14 cases, 2 deaths.
Tennessee: Memphis June 28-July 5, 2 cases.
Wisconsin: Green Bay, June 29-July 6, 2 cases; Milwaukee, June 28-July 5, 4 cases.

SMALLPOX—FOREIGN.

Austria: Prague, June 14-21, 3 cases.
Belgium: Antwerp, June 7-21, 3 cases, 3 deaths.
Brazil: Pernambuco, May 15-31, 14 deaths.
Canada: Winnipeg: June 7-28, 3 cases.
China: Hongkong, May 17-24, 1 case.
Colombia: Panama, June 23-30, 5 cases.
France: Paris, June 14-21, 1 death; St. Etienne, May 15-31, 1 case.
Great Britain: Birmingham, June 14-28, 13 cases; Liverpool, June 14-28, 4 cases, 1 death; London, June 14-21, 107 cases, 24 deaths.
India: Bombay, June 3-10, 11 deaths; Calcutta, May 31-June 7, 1 death; Madras, May 31-June 6, 1 death.
Italy: Naples, June 7-14, 6 cases; Palermo, June 14-21, 11 cases, 1 death.
Japan: Yokohama, May 31-June 7, 1 case.
Mexico: City of Mexico, June 22-29, 2 cases, 1 death; Vera Cruz, June 21-28, 1 case, 2 deaths.
Netherlands: Rotterdam, June 14-28, 1 case.
Russia: Moscow, May 31-June 4, 34 cases, 9 deaths; Odessa, June, 14-21, 6 cases, 1 death; St. Petersburg, June 7-21, 27 cases, 2 deaths.
Straits Settlements: Singapore, May 10-17, 1 death.
Switzerland: Geneva, May 31-June 14, 2 cases.

YELLOW FEVER.

Brazil: Bahia, June 7-14, 2 cases.
Colombia: Panama, June 23-30, 6 cases, 2 deaths.
Mexico: Coatzacoalcos, June 14-21, 10 cases, 5 deaths; Vera Cruz, June 21-28, 21 cases, 10 deaths.

PLAGUE.

Brazil: Pernambuco, May 15-31, 13 deaths.
China: Hongkong, May 17-24, 33 cases, 3 deaths; Macao, June 3, present.
India: Bombay, June 3-10, 101 deaths; Calcutta, May 31-June 7, 90 deaths.
Turkey: Pera, July 1, declared.

CHOLERA.

China: Hongkong, May 12-24, 38 cases, 31 deaths.
India: Bombay, June 3-10, 2 deaths; Calcutta, May 31-June 7, 51 deaths.
Japan: Saga Ken, June 16, 26 cases, 8 deaths.
Straits Settlements: Singapore, May 10-17, 92 deaths.